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# SECTION 01025

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#### SECTION 01025

#### MEASUREMENT AND PAYMENT

## PART 1 GENERAL

#### 1.1 LUMP SUM PAYMENT ITEMS

#### 1.1.1 General

Payment items for the work of this contract for which the Task Order lump sum payments will be made will be listed in each Request For Proposal and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

#### 1.1.2 Lump Sum Items

- a. "Mobilization and Demobilization"
  - (1) Payment will be made for costs associated with mobilization and demobilization, as defined in Special Clause PAYMENT FOR MOBILIZATION AND DEMOBILIZATION.
  - (2) Unit of measure: lump sum.

#### 1.2 UNIT PRICE PAYMENT ITEMS

#### 1.2.1 General

Payment items for the work of this contract on which the Task Order unit price payments will be made will be listed in each Request For Proposal and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

## 1.2.2 Unit Price Items

- a. "Dredging" [Item No. 0001, 0002, 0003, 0004, 0005, 0006, 0007, 0008, 0009, 0010, 0011, 00012, 0013, 0014, 0015, 0016].
  - (1) This item shall include all work as specified in SECTION 02482 DREDGING. The Contract unit price per cubic yard of dredging shall include the cost of removal, conveyance and disposal of all materials as shown on the drawings and as specified herein, except original materials, ledge rock, boulders, cobbles, rock fragments, wrecks, scrap materials, snags, stumps, piles, debris or other material which cannot be removed or buried below the required depth by the plant specified in the accepted bid, or the

equivalent of such plant, without blasting or special apparatus. The unit price shall also include the cost of all work required to be performed for the use of the disposal area. Nothing in this paragraph shall be construed as prohibiting the removal of excepted material by special means at the prices agreed and approved in accordance with applicable provisions of the contract.

- (2) Unit of measure: Payment for all acceptably completed work required under SECTION 02482 of the specifications will be made at the applicable Task Order unit price per cubic yard.
- PART 2 PRODUCTS (NOT APPLICAVLE)
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#### SECTION 01090

# SOURCES FOR REFERENCE PUBLICATIONS

#### PART 1 GENERAL

#### 1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the sponsoring organization, e.g. UL 1 (1993; Rev thru Jan 1995) Flexible Metal Conduit. However, when the sponsoring organization has not assigned a number to a document, an identifying number has been assigned for convenience, e.g. UL's unnumbered 1995 edition of their Building Materials Directory is identified as UL-01 (1995) Building Materials Directory. The sponsoring organization number (UL 1) can be distinguished from an assigned identifying number (UL-01) by the lack of a dash mark (-) in the sponsoring organization assigned number.

#### 1.2 ORDERING INFORMATION

The addresses of the organizations whose publications are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the sponsoring organization should be ordered from the source by title rather than by number.

# AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Ph: 610-832-9585
Fax: 610-832-9555
E-mail: cservice@astm.org

# CODE OF FEDERAL REGULATIONS (CFR)

Order from:
Government Printing Office
Washington, DC 20402
Ph: 202-512-1800
Fax: 202-275-7703
Internet: http://www.pls.com:8001/his/cfr.html

CORPS OF ENGINEERS (COE)

Order from:
U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services
Branch, TIC
3909 Halls Ferry Rd.
Vicksburg, MS 39180-6199

Ph: 601-634-2355 Fax: 601-634-2506

## MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)

Financial Services Division Burea of Finance P.O. Box 30050 425 W. Ottawa St. Lansing, Mi 48909 Modem: 517-355-0014

ENGINEERING MANUALS (EM)
SAFETY AND HEALTH REQUIREMENTS MANUAL

USACE Publications Depot Attn: CEIM-SP-D 2803 52nd Avenue Hyattsville, MD 20781-1102 Ph: 301-394-0081

# ENGINEERING REGULATIONS (ER)

USACE Publications Depot Attn: CEIM-SP-D 2803 52nd Avenue Hyattsville, MD 20781-1102 Ph: 301-394-0081

# ENVIRONMENTAL PROTECTION AGENCY (EPA)

Public Information Center
401 M St., SW
Washington, DC 20460
Ph: 202-260-6257
FAX: 202-260-6257
Internet: http://www.epa.gov NOTE: Some documents are available only from National Technical Information
Services (NTIS)
5285 Port Royal Rd.
Springfield, VA 22161
Ph: 703-487-4600
Fax: 703-321-8547
Internet: http://www.fedworld.gov/ntis/ntishome.html

PART 2 (Not Applicable)

PART 3 (Not Applicable)

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# SECTION 01100

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#### SECTION 01100

## SPECIAL PROJECT PROCEDURES

#### PART 1 GENERAL

#### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred within the text by the basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

33 CFR 320-330

General Regulatory Policies, Permits, Enforcement and Definitions

40 CFR 233

State Program Regulations

#### 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Utility Location Plan; G-AOF

Submit a plan of the proposed procedure for locating existing utilities prior to commencing work at the project site. Also submit a copy of the utility location findings prior to commencing work on the site.

Traffic Control Plan; G-AOF

At least fifteen (15) calendar days prior to commencing work at the site, submit a detailed, site specific plan for the control of traffic on the public roadways adjacent to the work area for each task order. Coordination of construction traffic with public use of the roadways shall be fully described, including all safety related characteristics.

Survey Note Format; G-AOF

Submit the proposed survey note format prior to performing any survey work at the work site.

SD-18 Records

Notice to Mariners

A copy of the completed "NOTICE TO MARINERS" form shall be provided prior to the commencement of work.

Buoy Relocation Position

Immediately upon relocating any U.S. Coast Guard buoys the Contractor shall report their position by latitude and longitude in writing.

Survey Information

Upon completion of the contract work, the originals of all field notes, sketches, recordings and computations made by the Contractor in performing the layout work shall be submitted in ring binders.

#### 1.3 PRECONSTRUCTION CONFERENCE

After issuance of a Task Order, a conference will be arranged by the Contracting Officer's Representative between responsible personnel of the Contractor, Area Office and District Office. At this conference, the Contractor will be oriented with respect to Government procedures and line of authority for wage rates, contractual, administrative, and construction matters.

### 1.4 REGULATORY REQUIREMENTS

# 1.4.1 Additional Work Proposed and Not Authorized

## 1.4.1.1 Work Subject to 33 CFR 320-330

Any additional work (not specifically shown on the plans or delineated in the specifications) proposed by the Contractor in or affecting navigable waters, including wetlands (as defined in 33 CFR 320-330, published in the Federal Register Vol.51, No. 219, Thursday, November 13, 1986) shall not be performed without a Department of the Army Permit. This requirement shall be applicable to all work, permanent or temporary, and/or fill(s). The Department of the Army Permit shall be approved by the District Engineer or Deputy District Engineer in accordance with the laws of the United States and the regulations promulgated thereunder, including, but not limited to, the River and Harbor Act of 1899, the Clean Water Act and the National Environmental Policy Act of 1969, as amended. Corps employees (Contracting Officer's Representatives (COR) or inspectors) are not delegated authority to authorize such work. Information on making application for such permit(s) may be obtained by contacting one of the offices as listed hereinafter. When applying for information or a permit, a copy of any correspondence should be directed to the Contracting Officer of this contract. If a permit is not obtained, the additional work cannot be accomplished. Any delay in processing the permit will not constitute the basis of a claim under this contract. The fact that the Contractor is performing work under a Department of the Army Contract will give the Contractor no greater rights than any other applicant for a Department of the Army Permit.

#### MICHIGAN-INDIANA

Regulatory Functions Branch Engineering & Technical Services U.S. Army Engineer District, Detroit P. O. Box 1027 Detroit, MI 48231 Telephone: 313-226-6813

# 1.4.1.2 Work Subject to 40 CFR 233

Any additional work (not specifically shown on the plans or included in the

specifications), proposed by the Contractor, in or affecting waters of the United States, including wetlands, in the State of Michigan (as defined in 40 CFR 233, published in the Federal Register, Vol. 49 No. 192, Tuesday October 2, 1984) shall not be performed without a State of Michigan regulatory permit. Information on making an application for such permit may be obtained by contacting the office listed hereinafter. When applying for a permit or for information, a copy of any correspondence shall be furnished to the Contracting Officer. If a permit is not obtained, the additional work shall not be performed. Any delay in obtaining or processing the permit will not constitute a basis for a claim under this contract.

#### STATE OF MICHIGAN

Department of Environmental Quality Land & Water Management Division P.O. Box 30458 Stevens T. Mason Building Lansing, MI 48909 Telephone: 517-373-4608

## 1.5 PROJECT/SITE CONDITIONS

# 1.5.1 Condition and Use of Project Site

The drawings indicate soundings and elevations at the dredging and placement site as found in condition surveys made as stated on the contract drawings. A notification of at least five (5) calendar days shall be given to the Contracting Officer prior to bringing any construction equipment or material upon the work site. The Contractor shall be responsible for damages that may be suffered due to its operations. The Contractor shall note CLAUSE titled "PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS."

## 1.5.1.1 Physical Conditions

The physical conditions shown on the drawings are indicative of those that prevailed at the time of the site investigations and may be different than those at the time of construction. Significant variations that would require changes to the plans or specification shall be reported to the Contracting Officer immediately.

# 1.5.2 Waterways Navigation and Traffic

The Contractor shall acquaint itself with all information and regulations pertaining to navigation and vessel traffic within the waterways at the project site. The Contractor shall coordinate with the U.S. Coast Guard to assure that a "NOTICE TO MARINERS" is issued prior to its work activity at the project site. A copy of the requisite notice form is enclosed in SECTION 01999. The completed form shall be sent to the address stated in the Subparagraph entitled "Temporary Lights, Signals and Buoys Required by U.S. Coast Guard". The Government will not undertake to keep the waterways free from vessels or other obstructions, except to the extent of such regulations, if any, as may be prescribed by the Secretary of the Army, in accordance with the provisions of Section 7 of the River and Harbor Act approved 8 August 1917 (see Title 33, U.S.C.A. Sec. 1). The Contractor is required to conduct its work in such manner as to obstruct navigation as little as possible and, in case the Contractor's plant so obstructs a channel as to make difficult or endanger the passage of vessels, said plant

shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage. Upon completion of the work, the Contractor shall promptly remove its plant, including ranges, buoys, piles, and other marks placed by it under the contract in navigable waters or on shore.

# 1.5.2.1 Navigation

Information and regulations pertaining to navigation may be obtained from the current issue of the "UNITED STATES COAST PILOT 6," issued annually by the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA). The "UNITED STATES COAST PILOT" may be obtained from National Ocean Survey, NOAA, Distribution Division-C44, Riverdale, Maryland 20840.

#### 1.5.2.2 Traffic

Vessels that may use the waterways at the project site consist of recreational craft and commercial vessels. This traffic may interfere with contract operations and the Contractor shall conduct its work with due regard to and in coordination with the requirements of all navigation. Information regarding the types and amount of passages made by commercial vessels that may use the waterways at the project site may be obtained from the current issue of the "Waterborne Commerce of the United States, Part 3, Waterways and Harbors, Great Lakes," published by the Department of Army, Corps of Engineers. The Department of the Army publication may be obtained at no charge from the following:

District Engineer, U.S. Army Engineer District, New Orleans, Waterborne Commerce Section, P.O. Box 60267, New Orleans, Louisiana 70160. Phone 504-862-1425, FAX 504-862-1091.

# 1.5.3 Existing Vegetation, Structures, Equipment, Utilities & Improvements

General locations of applicable existing utilities, vegetation, structures, equipment and improvements, based upon latest information available to the Government have been shown on the drawings. However, it is the Contractor's obligation to establish the exact horizontal and vertical location and size of all existing utility lines which are located within the required work area. The Contractor shall submit a utility location plan for approval by the Contracting Officer, locating existing utilities and a copy of its findings prior to commencing work on the site. Any utility lines which are not found by the Contractor, but which are known to exist at the project site, shall be reported to the Contracting Officer immediately. The Contracting Officer will have the option of directing commencement of work at the site or requiring the Contractor to submit further plans for locating the utility lines. Once the utilities have been located and marked, the Contractor shall be deemed to have the location made known to it pursuant to CLAUSE titled "PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS." The Contractor is required under CLAUSE titled "PERMITS AND RESPONSIBILITIES" to comply with, but not limited to, the Michigan Protection of Facilities During Construction Activities Act. If the Contractor damages any existing utility line, vegetation, structure, equipment or improvement, a report thereof shall be made immediately to the Contracting Officer. In any event, existing utility lines, vegetation, structures, equipment or improvements shall be protected from damage, and if damaged, shall be repaired by the Contractor at its own expense.

#### 1.5.4 Identification of Employees

The Contractor shall be responsible for requiring each employee engaged on the work to wear a hardhat of a distinctive color to identify that the person is an employee of the Contractor or display such identification as may be approved.

# 1.5.5 Contractor-Furnished Utility Services

The Contractor shall furnish, at its own expense, all water, electric current and other utilities required for its use.

#### 1.5.6 Contract Supervision and Representation

The Contractor's local representative shall be available to Government representatives during duty hours, 8 a.m. to  $4:30~\mathrm{p.m.}$ , on normal working days and shall be available by telephone marine radio or cellular phone at other times. The name of the Contractor's representative and the contact telephone number shall be furnished to the Government.

#### 1.5.7 Coordination with Others

The Contractor is informed that other Contractors may be conducting operations adjacent to or near the limits of work under this contract. The Contractor shall coordinate its operations with others such that the work under this contract is completed within the time established in CLAUSE entitled "COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK."

#### 1.5.8 Traffic Control Plan

For each Task Order, the Contractor shall control traffic in accordance with its approved plan. The traffic control plan shall be in detail and size specific for the control of traffic on the public roadways adjacent to the work area. Coordination of construction traffic with public use of the roadways shall be fully described, including all safety related characteristics.

#### 1.5.9 Temporary Lights, Signals and Buoys Required by Coast Guard

All temporary lights, signals and buoys required by the U.S. Coast Guard must be displayed during the required work. Information regarding required signals, lights, buoys and other requirements may be obtained from the Commander (OAN), U.S. Coast Guard, Shore Maintenance Detachment, ATTENTION: Aids to Navigation Branch, 1240 East Ninth Street, Cleveland, Ohio 44199-2060, Telephone (216) 522-3990.

## 1.5.10 Navigation Buoys

## 1.5.10.1 Buoy Relocation Position

If the relocation of existing navigation buoys is required to perform the contract work, the Contractor shall request permission for their relocation from the U.S. Coast Guard through the Contracting Officer. The request shall be provided to the Contracting Officer not less than three (3) weeks prior to need of the buoy relocation. The Contractor shall be responsible for performing the relocation work, which shall be in accordance with U.S. Coast Guard requirements.

## 1.5.10.2 Temporary Dredging and Construction Buoys

In order to distinguish temporary buoys placed and maintained by the Contractor for dredging or construction purposes from aids to navigation placed by the U.S. Coast Guard, the Contractor's buoys shall be white and the top two (2) feet shall be light green in color. The Contractor shall remove its temporary buoys at the completion of the work.

## 1.5.10.3 Buoy Markings

If buoys with special markings are needed to indicate the different sides of the navigable channel, prior arrangements shall be made with the U.S. Coast Guard, through the Contracting Officer.

#### 1.5.11 Layout of Work and Surveys

## 1.5.11.1 Layout of Work

The following requirements are in addition to the requirements of SECTION 00800 CLAUSE titled "LAYOUT OF WORK." The Government has established bench marks and horizontal control points at the site of the work. Horizontal control points and descriptions of bench marks are shown on the drawings and on sheets shall be provided with the Request For Proposal. The elevations of bench marks are referred to mean water level (IGLD 1985).

## 1.5.11.2 Surveyor Requirements

Prior to any survey work by the Contractor he shall submit his Survey Note Format showing in detail how he plans on taking survey notes in the field for the approval of the Contracting Officer. From these control points and bench marks, the Contractor shall lay out the work by establishing all lines, grades, range markers and gauges at the site as necessary to control the work. All survey information shall be recorded in accordance with standard and approved methods and in the format approved by the Contracting Officer. All field notes, sketches, recordings and computations made by the Contractor in performing the layout work shall be available at all times during the progress of the work for ready examination by the Contracting Officer or his or her duly authorized representative and upon completion of the contract work the originals shall be turned over to the Contracting Officer in ring binders.

# 1.5.11.3 Suspension

The Contracting Officer may require that work be suspended at any time when location and limit marks established by the Contractor are not reasonably adequate to permit checking the work. Such suspension will be withdrawn upon satisfactory replacement of location and limit marks. Such suspension shall be at no additional cost to the Government and shall not entitle the Contractor to an extension of time for completing the work.

#### 1.6 SEQUENCING AND SCHEDULING

#### 1.6.1 Exclusion of Period in Computing Completion Schedules

No work will be required during the period between 1 December and 15 April, inclusive and the days in this period will not be counted when computing the required completion date. The Contractor may perform work, unless otherwise prohibited, during all or any part of this period upon giving prior written notice to the Contracting Officer.

## 1.6.2 Dredging Period Restriction

The Contractor's attention is directed to the allowed and prohibited dredging periods as established by the State of Michigan for this project as specified in SECTION 01130, "ENVIRONMENTAL PROTECTION" Paragraph, "PROTECTION OF FISH AND WILDLIFE RESOURCES", Subparagraph, "State of Michigan - Allowed and Prohibited Dredging". The number of calendar days within which the Contractor is required to complete the work under each Request For Proposal, as established is exclusive of the above referenced periods during which dredging is prohibited and the days in these periods will not be counted when computing the required completion date.

# 1.6.3 Sunday, Holiday And Night Operations

When the Contractor elects to work on Sundays, holidays or nights (when not prohibited herein), notice of its intention to do so shall be given to the Contracting Officer not less than forty-eight (48) hours in advance thereof. Adequate lighting for thorough inspection of night operations shall be provided by the Contractor at its expense.

#### 1.6.3.1 Work Period Restrictions

No work is allowed at the project sites during the following Holiday periods:

- (1) 6 p.m. 28 May to 6 a.m. 1 June 2004
- (2) 6 p.m. 2 July to 6 a.m. 6 July 2004
- (3) 6 p.m. 3 September to 6 a.m. 7 September 2004
- (4) 6 p.m. 24 November to 6 a.m. 29 November 2004
- (5) 6 p.m. 23 December to 6 a.m. 3 January 2005
- (6) 6 p.m. 27 May to 6 a.m. 31 May 2005
- (7) 6 p.m. 1 July to 6 a.m. 5 July 2005
- (8) 6 p.m. 2 September to 6 a.m. 6 September 2005
- (9) 6 p.m. 23 November to 6 a.m. 28 November 2005
- (10) 6 p.m. 23 December to 6 a.m. 2 January 2006
- (11) 6 p.m. 26 May to 6 a.m. 30 May 2006
- (12) 6 p.m. 3 July 2004 to 6 a.m. 5 July 2006
- (13) 6 p.m. 1 September to 6 a.m. 5 September 2006
- (14) 6 p.m. 22 November to 6 a.m. 27 November 2006
- (15) 6 p.m. 22 December to 6 a.m. 2 January 2007
- (16) 6 p.m. 25 May to 6 a.m. 29 May 2007

- (17) 6 p.m. 3 July to 6 a.m. 5 July 2007
- (18) 6 p.m. 31 August to 6 a.m. 4 September 2007
- (19) 6 p.m. 21 November to 6 a.m. 26 November 2007
- (20) 6 p.m. 21 December to 6 a.m. 2 January 2008

The above-stated no-work periods, as applicable, are included in the number of calendar days within which the Contractor is required to complete the work as established in each task order scope of work, and therefore the above-stated no-work periods will not entitle the Contractor to additional time for completion of the work.

#### 1.6.4 Start Work

Evidence that the Contractor has started mobilization and preparation of submittal register, and other preparatory work will satisfy the requirement that work commence within ten (10) calendar days after award of the Task Order.

# 1.7 PRESERVATION OF HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

If, during construction activities, the Contractor observes items that may have archaeological, historical or cultural value, such observations shall be reported immediately to the Contracting Officer so that the appropriate authorities may be notified and a determination can be made as to their significance and what, if any, special disposition of the funds should be made. The Contractor shall cease all activities that may result in the destruction of these resources and shall prevent its employees from trespassing on, removing, or otherwise damaging such resources.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

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## DIVISION 01 - GENERAL REQUIREMENTS

## SECTION 01101

## REAL ESTATE

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PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

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#### SECTION 01101

#### REAL ESTATE

#### PART 1 GENERAL

#### 1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-18 Records

Additional Real Estate Rights; G-RED

Copies of any agreements for Contractor-acquired real estate rights shall be furnished before entering thereon.

### 1.1.1 REGULATORY REQUIREMENTS

## 1.1.2 Real Estate Rights

Rights for the use of the placement area have been obtained and the general limits of the areas shall be shown on the Request For Proposal drawings. All real estate lake ward of the Ordinary High Water Mark (Elevation 581.5 feet, IGLD 1985) is under Federal jurisdiction and no permit or agreements are necessary for work therein except as specified in SECTION 01100, "SPECIAL PROJECT PROCEDURES", Paragraph, "Additional Work Proposed and Not Authorized". No other real estate rights have been obtained by the Government for this project.

#### 1.1.3 Additional Real Estate Rights

Any additional real estate rights desired by the Contractor shall be obtained by the Contractor at its own expense. Such agreements shall clearly relieve the Government of any responsibility for damages or liability resulting from the Contractor's use of such grounds.

#### 1.2 PROJECT/SITE CONDITIONS

#### 1.2.1 Location and Verification

It shall be the Contractor's responsibility to accurately locate the limits of all lands utilized under the contract. The corner and angle points of each area for which rights have been obtained shall be marked with semipermanent markers except where there is an approved existing property marker. Temporary markers shall be placed at points on alignment. The points on alignment shall be marked at stations so that intervals between points do not exceed 200 feet.

#### 1.2.2 Survey Markers

All markers shall be installed in an area prior to its use and they shall be available for reference during and upon completion of use of the area.

Where approved existing property markers are found, a witness stake, as specified in Subparagraph, "Semipermanent Markers" below, shall be provided. If the types of markers specified hereinafter cannot be used, other types, as approved by the Contracting Officer, shall be provided.

#### 1.2.2.1 Semipermanent Markers

The markers shall be a steel rod one-half inch in diameter and four (4) feet long. The steel rod shall be driven vertically into the ground so that the top is flush with the finished ground surface. Each marker shall be witnessed by a 2" x 2" yellow stake extending two (2) feet above the ground surface and driven into the ground until stable, with not less than one (1) foot penetration.

#### 1.2.2.2 Temporary Markers

Markers shall be 2" x 2", red-colored, wood hub stakes driven into the ground until stable (not less than one (1) foot penetration) with two (2) feet projecting above the ground surface. If the period in which temporary markers are to be in place exceeds one (1) construction season, a more permanent type of marker, as approved, shall be provided.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

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#### SECTION 01130

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#### SECTION 01130

#### ENVIRONMENTAL PROTECTION

#### PART 1 GENERAL

#### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

40 CFR 261

Identification and listing of Hazardous Waste

ENGINEERING MANUALS (EM)

EM 385-1-1

(1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)

MDOT 2003

(2003) Standard Specifications for Construction

## 1.2 DEFINITIONS

Environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents that adversely affect human health or welfare; unfavorably alter ecological balances of plant or animal communities; or degrade the environment from an aesthetic, cultural or historic perspective. Environmental protection is the prevention/control of pollution and habitat disruption that may occur during construction. The control of environmental pollution and damage requires consideration of air, water, land, biological and cultural resources; (archaeological and historical resources) and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive materials; and other pollutants.

## 1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Environmental Protection Plan; G-ECD

For each Task Order, submit in writing an Environmental Protection Plan within ten (10) calendar days after receipt of the Task Order award. See Article titled ENVIRONMENTAL PROTECTION PLAN for details. Information on existing environmental documents pertaining to the project may be obtained

by contacting the Environmental Analysis Branch of the Planning, Programs and Project Management Division, Detroit District, U.S. Army Corps of Engineers, 477 Michigan Avenue, Detroit, Mi. 48226.

#### 1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

The Contractor shall comply with all applicable Federal, State, and local laws, regulations, permits and licenses. The Contractor shall provide environmental protective measures and procedures to prevent and control pollution, limit habitat disruption, and correct environmental damage that occurs during construction.

#### 1.4.1 Protection of Features

This section supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. The Contractor shall prepare a list of features requiring protection under the provisions of the contract clause which are not specially identified on the drawings as environmental features requiring protection. The Contractor shall protect those environmental features, indicated specially on the drawings, in spite of interference which their preservation may cause to the Contractor s work under the contract. The Contractor shall confine its activities to areas defined by contract drawings and specifications.

#### 1.4.2 Environmental Assessment of Contract Deviations

The Contract specifications have been prepared to comply with the special conditions and mitigation measures of an environmental nature which were established during the planning and development of this project. The Contractor is advised that deviations from the drawings or specifications (e.g., proposed alternate borrow areas, disposal areas, staging areas, alternate access routes, etc.) could result in the requirement for the Government to reanalyze the project from an environmental standpoint. Deviations from the construction methods and procedures indicated by the plans and specifications which may have an environmental impact will require a extended review, processing, and approval time by the Government. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact including any environmental documents pertaining to the project. The Contractor shall obtain any necessary permits or licenses that have not been obtained by the Government.

#### 1.5 ENVIRONMENTAL PROTECTION PLAN

If the Contractor is awarded a Task Order, the Contractor shall submit an Environmental Protection Plan for review and acceptance by the Contracting Officer. The Government will consider an interim plan for the first 30 days of operations. However, the Contractor shall furnish an acceptable final plan not later than 30 calendar days after receipt of the Notice to Proceed. Acceptance is conditional and is predicated upon satisfactory performance during construction. The Government reserves the right to require the Contractor to make changes in the Environmental Protection Plan or operations if the Contracting Officer determines that environmental protection requirements are not being met. The plan shall detail the actions which the Contractor shall take to comply with all applicable Federal, State, and local laws and regulations concerning environmental protection and pollution control and abatement, as well as the additional specific requirements of this contract. No physical work at the site shall

begin prior to acceptance of the Contractor s plan or an interim plan covering the work to be performed. The environmental protection plan shall include, but not be limited to, the following:

# 1.5.1 Federal, State and Local Laws and Regulations

The Contractor shall be knowledgeable of all Federal, State and local environmental laws and regulations which apply to the construction operations under the Contract and shall list any unique requirements applicable to this contract as part of the Environmental Protection Plan.

## 1.5.2 Spill Control Plan

The Contractor shall include as part of the environmental protection plan, a Spill Control Plan. The plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by the Emergency Response and Community Right-to-Know Act or regulated under State or local laws or regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include as a minimum:

- a. The name of the individual who will be responsible for implementing and supervising the containment and cleanup.
- b. Training requirements for Contractor's personnel and methods of accomplishing the training.
- c. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
- d. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
- e. The methods and procedures to be used for expeditions contaminant cleanup.
- f. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity spill occurs. The plan shall contain a list of the required reporting channels and telephone numbers.

# 1.5.3 Recycling and Waste Minimization Plan

The Contractor shall submit a Recycling and Waste Minimization Plan as a part of the Environmental Protection Plan. The plan shall detail the Contractor's actions to comply with the following recycling and waste minimization requirements:

- a. The Contractor shall participate in State and local government sponsored recycling programs to reduce the volume of solid waste materials at the source.
- 1.5.4 Contaminant Prevention Plan

As a part of the Environmental Protection Plan, the Contractor shall prepare a contaminant prevention statement identifying potentially hazardous substances to be used on the job site and intended actions to prevent accidental or intentional introduction of such materials into the air, water, or ground. The Contractor shall detail provisions to be taken to meet Federal, State, and local laws and regulations regarding the storage and handling of these materials.

#### 1.5.5 Environmental Monitoring

The Contractor shall include in the plan the details of environmental monitoring requirements under the laws and regulations and a description of how this monitoring will be accomplished. All environmental monitoring shall include monitoring of construction effects on "lands and water, air resources" and that the "effect to be monitored includes noise and vibration".

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 SPECIAL ENVIRONMENTAL PROTECTION REQUIREMENTS

#### 3.1.1 Tree Protection

No ropes, cables, or guys shall be fastened to or attached to any tree(s) for anchorage unless specifically authorized by the Contracting Officer. Where such special use is permitted, the Contractor shall provide effective protection to prevent damage to the tree and other land and vegetative resources. Unless specifically authorized by the Contracting Officer, no construction equipment or materials shall be placed or used within the drip line of trees shown on the drawings to be saved. No excavation or fill shall be permitted within the drip line of trees to be saved except as shown on the drawings.

3.1.2 Location fo Field Offices, Storage & Other Contractor Facilities

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in area provided by the Contractor. Temporary movement or relocation of Contractor facilities shall be made only on approval by the Contracting Officer.

3.1.3 Protection of Fish, Wildlife and Flora

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish, wildlife and flora. Species that require specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations. See Subparagraph, "Environmental Protection Plan."

3.1.4 U.S. Department of Agriculture (USDA) Quarantined Considerations

The Contractor shall thoroughly clean all construction equipment at the prior job site in a manner that ensures all residual soil is removed and that egg deposits from plant pests are not present. The Contractor shall consult with the USDA Plant Protection and Quarantine (USDA - PPQ)

jurisdictional office for additional cleaning requirements that may be necessary.

## 3.1.5 Control of Non-Indigenous Aquatic Nuisance Species

The Contractor shall conduct diligent watercraft operating practices to prevent the spread of Aquatic Nuisance Species (ANS). Such practices shall include, but not be limited to, cleaning equipment on-site to prevent the spread of seeds, eggs, larvae, or other dispersal vectors (e.g. do not transport soil and plant matter from one location to another); and discharging or exchanging ballast water or other water from a vessel of any type only at a location where chances for survival of ANS are minimal, such as at cold, deep regions of Lake Superior which are far from shore.

# 3.1.6 Soil Disposal Areas on Government Property

Material disposal on Government property shall be disposed only in those areas designated on the contract drawings. Hazardous, toxic, and radiological wastes (HTRW) shall not be disposed of on Government property. Disposal operations shall be managed and controlled to prevent erosion of soil or sediment from entering nearby waters or wetlands. Disposal operations shall be developed and managed in accordance with the grading plan shown on the drawings or as approved by the Contracting Officer.

## 3.1.7 Disposal of Solid Wastes

Solid waste is rubbish, debris, waste materials, garbage, and other discarded solid materials (excluding clearing debris and hazardous waste as defined in following paragraphs). Solid waste shall be placed in containers and disposed on a regular schedule. All handling and disposal shall be conducted in such a way as to prevent spillage and contamination.

## 3.1.8 Protection of Land

#### 3.1.8.1 Work Area Limits

Prior to any construction the Contractor shall mark where work is to be performed under this contract. Isolated areas within the general work area which are to be saved and protected shall also be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, the markers shall be visible during darkness, The Contractor shall convey to its personnel the purpose of marking and/or protection of all necessary objects.

#### 3.1.8.2 Protection of Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features to be preserved, indicated and defined on the drawings submitted by the Contractor as a part of the Environmental Protection Plan shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

#### 3.1.8.3 Disposal of Chemical Waste

Chemical waste shall be stored in corrosion resistant containers, removed from the work area and disposed of in accordance with Federal, State, and local laws and regulations.

#### 3.1.8.4 Spillages

Special measures shall be taken to prevent chemicals, fuels, oils, greases, bituminous materials, ashes, sawdust, waste washings, herbicides and insecticides, rubbish or sewage, and other pollutants from entering public waters.

3.1.8.5 Hydrocarbons, Carbon Monoxide and Oxides of Nitrogen and Sulfur Oxides

Vapor/gaseous emissions of hydrocarbons, carbon monoxide, oxides of nitrogen and sulfur oxides from equipment shall be controlled to Federal and State allowable limits at all times.

#### 3.1.8.6 Odors

Odors from construction activities, processing and preparation of materials shall be controlled at all times.

#### 3.1.8.7 Protection from Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize damage to the environment by noise.

## 3.1.9 Clearing Debris

Clearing debris is trees, tree stumps, tree trimmings, and shrubs, and leaves, vegetative matter, excavated natural materials (e.g., dirt, sand, and rock), and demolition products (e.g., brick, concrete, glass, and metals).

- a. The Contractor shall collect trees, tree stumps, tree trimmings, shrubs, leaves, and other vegetative matter; and shall transport from Government property for proper disposal and/or recycling in compliance with Federal, State, and local requirements. The Contractor shall segregate the matter where appropriate for proper disposal. Untreated and unpainted scrap lumber may be disposed of with this debris where appropriate.
- b. Excavated natural materials shall be placed in the designated area on the drawings.
- c. Demolition products shall be transported from Government property for proper disposal and/or recycling in compliance with Federal, State, and local requirements.

# 3.1.10 Disposal of Contractor Generated Hazardous Wastes

Hazardous wastes are hazardous substances as defined in 40 CFR 261, or as defined by applicable State and local regulations. Hazardous waste generated by construction activities shall be removed from the work area and be disposed in compliance with Federal, State, and local requirements. The Contractor shall segregate hazardous waste from other materials and wastes, and shall protect it from the weather by placing it in a safe covered location; precautionary measures against accidental spillage such as berming or other appropriate measures shall be taken. Hazardous waste shall be removed from Government property within 60 days. Hazardous waste shall not be dumped onto the ground, into storm sewers or open water courses, or into the sanitary sewer system.

#### 3.1.11 Fuels and Lubricants

Fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spills and evaporation. Lubricants and waste oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with Federal, State, and local laws and regulations.

# 3.2 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

#### 3.2.1 Discovered Historic, Archaeological, and Cultural Resources

If during construction activities, items are observed that may have historic or archaeological value (e.g., Native American human remains or associated objects or artifacts are discovered), such items shall be protected in place and the observations shall be reported immediately to the Contracting Officer so that the District Archaeologist may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall prevent its employees from trespassing on, removing, or otherwise disturbing such resources.

#### 3.3 PROTECTION OF WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters.

#### 3.4 PROTECTION OF FISH AND WILDLIFE RESOURCES

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish, wildlife and flora. Species that required specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations. See Subparagraph, "Environmental Protection Plan."

# 3.4.1 State of Michigan - Allowed and Prohibited Dredging

During the following periods of the year dredging is allowed:

Harbor	Allowed Periods:
Arcadia Harbor	01 July through 31 May
Frankfort Harbor	01 July through 31 May
Grand Haven Harbor (Outer)	01 July through 30 April
Holland Harbor (Outer)	01 July through 31 May
Leland Harbor	01 January through 31 December
Lexington Harbor	01 June through 30 April
Ludington Harbor	01 January through 31 December

Manistee Harbor	15	July through 30 April
Muskegon Harbor	15	July through 30 April
New Buffalo Harbor	01	January through 31 December
Pentwater Harbor	01	January through 31 December
Port Sanilac Harbor	01	July through 30 April
Portage Lake Harbor	01	June through 31 March
Saugatuck Harbor	15	July through 30 April
St. Joseph Harbor (Outer)	15	July through 30 April
White Lake Harbor	01	July through 30 April

Dredging is prohibited during any other periods.

#### 3.4.2 Particulates

Airborne particulates, including dust particles, aerosols, and gaseous by products from construction activities and processing and preparation of materials shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, disposal sites, borrow areas, and all other work areas free from airborne dust which would cause a hazard or nuisance.

### 3.5 INSPECTION

If the Contracting Officer notifies the Contractor in writing of any observed noncompliance with contract requirements or Federal, State, or local laws, regulations, or permits, the Contractor shall inform the Contracting Officer of proposed corrective action and take such action to correct the noncompliance. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action is taken. No time extensions will be granted or costs or damages allowed to the Contractor for any such suspension.

# 3.6 MAINTENANCE OF POLLUTION CONTROL FACILITIES

The Contractor shall maintain all constructed pollution control facilities and portable pollution control devices for the duration of the Contract or for the length of time construction activities create the particular pollutant.

# 3.7 TRAINING OF CONTRACTOR PERSONNEL

Contractor personnel shall be trained in environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel monthly. The training and meeting agenda shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, installation and care of facilities (vegetative covers, etc.), and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control.

Anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants, shall also be discussed. Other items that must be discussed shall include recognition and protection of Archaeological sites and artifacts and historic structures.

#### 3.8 POST CONSTRUCTION CLEANUP OR OBLITERATION

The Contractor shall obliterate all signs of temporary facilities such as haul roads, work area, structures, stock piles of excess or waste materials, fencing, buoys, stakes, or other vestiges of construction within the work, storage and access areas or as directed by the Contracting Officer. Except for surfaced areas, the areas shall be restored to near natural conditions which permit the growth of vegetation thereon. In areas where restoration to near natural conditions is not required, surfaces shall be evenly and smoothly dressed, sloped to drain, and the edges of the restored area graded to be flush with the surrounding existing grade even if original contours are not restored. All damaged non-surfaced areas shall be restored by topsoiling, fertilizing, seeding and mulching, unless otherwise specified or directed. The topsoiling, fertilizing, seeding, and mulching shall be in accordance with the applicable provisions of MDOT 1996.

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## SECTION 01330

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#### SECTION 01330

#### SUBMITTAL PROCEDURES

#### PART 1 GENERAL

#### 1.1 SUMMARY

# 1.1.1 Government-Furnished Information

Submittal register database and submittal management program will be delivered to the contractor, by contracting officer on 3 1/2 inch disk. Register database will have the following fields completed, to the extent that will be required by the Government during subsequent usage.

- Column (c): Lists specification section in which submittal is required.
- Column (d): Lists each submittal description (SD No. and type, e.g. SD-04 Drawings) required in each specification section.
- Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.
- Column (f): Indicate approving authority for each submittal. A "G"
   indicates approval by contracting officer; a blank indicates
   approval by QC manager.

The database and submittal management program will be extractable from the disk furnished to contractor, for operation on contractor's IBM compatible personal computer with 640kb RAM, a hard drive, and 3 1/2 inch high density floppy disk drive.

#### 1.2 DEFINITIONS

#### 1.2 Submittal

Shop drawings, product data, samples, and administrative submittals presented for review and approval. Contract Clauses "FAR 52.236-5, Material and Workmanship," paragraph (b) and "FAR 52.236-21, Specifications and Drawings for Construction," paragraphs (d), (e), and (f) apply to all "submittals."

# 1.3 Types of Submittals

All submittals are classified as indicated in paragraph "Submittal Descriptions (SD)". Submittals also are grouped as follows:

a. Shop drawings: As used in this section, drawings, schedules, diagrams, and other data prepared specifically for this contract, by contractor or through contractor by way of subcontractor, manufacturer, supplier, distributor, or other lower tier contractor, to illustrate portion of work.

- b. Product data: Preprinted material such as illustrations, standard schedules, performance charts, instructions, brochures, diagrams, manufacturer's descriptive literature, catalog data, and other data to illustrate portion of work, but not prepared exclusively for this contract.
- c. Samples: Physical examples of products, materials, equipment, assemblies, or workmanship that are physically identical to portion of work, illustrating portion of work or establishing standards for evaluating appearance of finished work or both.
- d. Administrative submittals: Data presented for reviews and approval to ensure that administrative requirements of project are adequately met but not to ensure directly that work is in accordance with design concept and in compliance with contract documents.

# 1.4 Submittal Descriptions (SD)

#### SD-01 Preconstruction Submittals

Submittal Register
Environmental protection plan
Quality control plan
Dredging, Conveyance, and Disposal Plan
Accident Prevention Plan (or Company Certificate of Compliance
Documentation)
Progress Chart

## SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the contractor for integrating the product or system into the project.

Drawings prepared by or for the contractor to show how multiple systems and interdisciplinary work will be coordinated.

## SD-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

# SD-04 Samples

Physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the

project.

Field samples and mock-ups constructed on the project site establish standards by which the ensuring work can be judged. Includes assemblies or portions of assemblies which are to be incorporated into the project and those which will be removed at conclusion of the work.

SD-05 Design Data

Calculations, mix designs, analyses or other data pertaining to a part of work.

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports

Daily checklists

Final acceptance test and operational test procedure

SD-07 Certificates

Statements signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a supplier, installer or subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

Confined space entry permits.

SD-08 Manufacturer's Instructions

Preprinted material describing installation of a product, system or material, including special notices and Material Safety Data sheets concerning impedances, hazards and safety precautions.

SD-09 Manufacturer's Field Reports

Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.

Factory test reports.

SD-10 Operation and Maintenance Data

Data intended to be incorporated in operations and maintenance manuals.

SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

As-built drawings

Special warranties

Posted operating instructions

Training plan

#### 1.5 SUBMITTAL CLASSIFICATION

Submittals are identified with submittal description (SD) numbers and are classified as follows:

# 1.5.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

# 1.5.2 Designated Reviewers

The organization designated to perform the review for approval for items requiring Government approval (G) is identified by acronym in the REVIEWER column on the SUBMITTAL REGISTER, ENG FORM 4288 or ENG FORM 4288 (RMS). Following is a list of the acronyms used and their full description:

AOF = The Resident U.S. Army Corps of Engineers Area Office

RED = Real Estate Division, Detroit District, U.S. Army Corps of Engineers

AEN = The Architect/Engineer firm that designed the project

 ${\tt ECD} = {\tt Engineering}$  and Construction Division, Detroit District, U.S. Army Corps of Engineers

#### 1.6 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the

Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

#### 1.7 DISAPPROVED SUBMITTALS

When a submittal is returned to the Contractor and marked "DISAPPROVED" or "APPROVED AS NOTED, REVISE AND RESUBMIT", the Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

#### 1.8 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

#### 3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Submittals shall be made in the required number of copies and to the applicable Area Office. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and stamped in accordance with ARTICLE titled STAMPS, and approved by the CQC representative. Each respective transmittal form (ENG FORM 4025) shall be signed and dated by the CQC representative certifying that the accompanying submittal complies with the contract requirements. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

#### 3.2 SUBMITTAL REGISTER (ENG FORM 4288)

In Section 01999, is one set of ENG Form 4288 listing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor will also be given the submittal register as a diskette containing the computerized ENG Form 4288 and instructions on the use of the diskette. Columns "d" through "r" have been completed by the

Government; the Contractor shall complete columns "a" and "s" through "u" and submit the forms (hard copy plus associated electronic file) to the Contracting Officer for approval within 10 calendar days after receipt of the Notice to Proceed. The Contractor shall keep this diskette up-to-date and shall submit it to the Government together with the monthly payment request. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. The submittal register and the progress schedules shall be coordinated.

#### 3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 10 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals. An additional 5 calendar days shall be allowed and shown on the register for review and approval of submittals for refrigeration and HVAC control systems.

#### 3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) enclosed in SECTION 01999 shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor, or may be copied from the enclosed form. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

#### 3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

#### 3.5.1 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

#### 3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control its procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

#### 3.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. The distribution of approved copies will be as specified in the Clause titled "SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION".

#### 3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals.

#### 3.9 RESERVATION OF RIGHTS

The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

#### 3.10 STAMPS

Stamps, approximately 2 inches high by 3 inches wide, and similar to the following, shall be used by the Contractor on the submittal data to validate approval:

CONTRACTOR
(Firm Name)
Approved
$\underline{}$ Approved with corrections as noted on submittal data and/or attached sheets(s).
SIGNATURE:
TITLE:
DATE:

#### 3.11 ACCIDENT PREVENTION PLAN

The format of the Contractor's Accident Prevention Plan shall be in accordance with APPENDIX A, MINIMUM BASIC OUTLINE FOR ACCIDENT PREVENTION PLAN of the SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385 1-1, 3 Sept 1996. A copy of NCE FORM 129 is included in SECTION 01999 for use in preparing activity hazard analysis documentation.

-- End of Section --

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#### SECTION 01451

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#### SECTION 01451

#### CONTRACTOR QUALITY CONTROL

#### PART 1 GENERAL

#### 1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Quality Control Plan; G-AOF

Submit in writing a Quality Control Plan within ten (10) calendar days after receipt of the Task Order Award.

SD-08 Statements

CQC System Manager; G-AOF

Submit in writing the name and qualifications of the Contractors  $\,$  Quality Control Manager.

SD-09 Reports

Preparatory Inspection Checklist

Submit a Preparatory Inspection Checklist 24 Hours in advance of beginning any of the required action of the preparatory control phases.

Initial Inspection Checklist

Submit a Initial Inspection Checklist 24 Hours in advance of beginning any of the required action of the initial control phases.

Daily Inspection Report

Submit a Daily Inspection Report within 24 Hours after any calendar day the Contractor is on the job site.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

#### 3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with Clause titled "INSPECTION OF CONSTRUCTION." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both on-site and off-site, and shall be

keyed to the proposed construction sequence.

#### 3.2 QUALITY CONTROL PLAN

#### 3.2.1 General

The Contractor shall furnish for review by the Government, not later than 10 days after receipt of the Task Order Award, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of Clause titled "INSPECTION OF CONSTRUCTION." The plan shall identify personnel, procedures, control, instructions, records, and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

#### 3.2.2 Content of the CQC Plan

The CQC plan shall include, as a minimum, the following to cover all construction operations, both on-site and off-site, including work by subcontractors:

- a. Information required in the paragraph titled "IMPLEMENTATION OF GOVERNMENT RESIDENT MANAGEMENT SUSTEM (RMS)" shall be incorporated into the Contractor's Quality Control plan, as applicable.
- b. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC system manager who shall report to the project superintend.
- c. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- d. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities and responsibilities. Copies of these letters shall also be furnished to the Government.
- e. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors. These procedures shall be in accordance with SECTION 01330, "SUBMITTAL PROCEDURES".
- f. Procedures for tracking preparatory, initial, and follow-up control phases, including documentation.
- g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures will establish verification that identified deficiencies have been corrected.

- h. Reporting procedures, including proposed reporting formats.
- i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks and has separate control requirements. This list shall be as agreed upon during the coordination meeting.

#### 3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in its CQC plan and operations including removal of personnel, as necessary, to obtain the quality specified.

#### 3.2.4 Changes to Plan

After acceptance of the QC plan, the Contractor shall submit any proposed QC plan changes to the Contracting Officer in writing a minimum of 7 calendar days prior to the proposed implementation date for the change. Changes to the plan shall not be made prior to the Contracting Officer's approval of the change.

#### 3.3 COORDINATION MEETING

Immediately after adjournment of the required Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the Quality Control Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. A draft copy of the COC Plan shall be provided to the Government at least three working days prior to the CQC meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, administration of the system for both on-site and off-site work, and the interrelationship of the Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting will be prepared by the Government and are to be signed by both the Contractor and the Contracting Officer or the Contracting Officer's Representative. The minutes shall be separate from the Preconstruction Conference minutes and shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

#### 3.3.1 Finalize CQC Plan

Immediately following the Preconstruction Conference, the Contractor shall finalize the CQC plan, taking into account comments made at the conference, and shall formally submit the CQC plan for acceptance. The Contractor shall allow up to 10 calendar days for review and acceptance of the finalized submittal.

#### 3.4 QUALITY CONTROL ORGANIZATION

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization which shall be

at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

#### 3.4.1 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the on site work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. This CQC System Manager shall be a construction person with a minimum of 3 years in related work. This CQC system manager shall be on site at all times during construction and shall be employed by the prime Contractor The CQC System Manager shall be assigned as System Manager but may have duties as project superintendent in addition to quality control. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

#### 3.4.2 Additional Requirements

In addition to the above experience and education requirements the CQC System Manager shall have completed the course titled "Construction Quality Management For Contractors". This course is periodically offered at one or more of the Area Offices within the District.

#### 3.4.3 Organizational Changes

The Contractor shall obtain Contracting Officer's acceptance before replacing any member of the CQC staff. Requests shall include the names, qualifications, duties, and responsibilities of each proposed replacement.

#### 3.5 SUBMITTALS

Submittals shall be as specified in SECTION 01330 "SUBMITTAL PROCEDURES". The CQC organization shall be responsible for certifying that all submittals are in compliance with the contract requirements.

#### 3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors, complies with the requirements of the contract. The controls shall be adequate to cover all construction operations and will be keyed to the proposed construction sequence. The controls shall include at least three phases of control to be conducted by the CQC system manager for all definable features of work, as follows:

#### 3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work and shall include:

- a. A review of each paragraph of applicable specifications.
- b. A review of the contract plans.
- c. A check to assure that all required submissions have been made and approved.

- d. A check to assure that provisions have been made to provide required control inspection.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- g. Discussion of procedures for constructing the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that phase of work.
- h. A check to ensure that the CQC plan for the work to be performed has been accepted by the Contracting Officer.
- i. The Government shall be notified at least 24 hours in advance of beginning any of the required action of the preparatory phase. This phase shall include a meeting conducted by the CQC system manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by a completed Preparatory Inspection Checklist and by separate minutes prepared by the CQC system manager and attached to the daily QC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract requirements.

#### 3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of preliminary work to ensure that it is in compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verification of full contract compliance. Verify required control inspection.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. A completed initial inspection checklist of this phase shall be prepared by the CQC system manager and attached to the daily QC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work on-site, or any time acceptable specified quality standards are not being met.

#### 3.6.3 Follow-up Phase

Daily checks shall be performed to assure continuing compliance with contract requirements until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work.

3.6.4 Implementation of Government Resident Management System (RMS)

The Contractor shall utilize the Government-furnished CQC Management Report, for its daily reports. (Copy enclosed in SECTION 01999). Other Contractor desired reporting forms may be used in addition to this form. The Contractor shall use a government-furnished RMS CQC computer module for managing the quality control for this project. On the Government-furnished Input Forms in SECTION 01999 for use with the RMS, the Contractor shall provide the following information:

- (1) Prime Contractor staffing
- (2) letter codes which the Contractor wishes to use in addition to those supplied with the program libraries. A list of current existing codes is provided in SECTION 01999.
- (3) subcontractor information showing trade, name, address, and insurance expiration dates
- (4) Definable features of work from a Government provided dictionary (may be expanded by the Contractor, as approved).
- (5) Pay activity and activity information, including minimum and maximum durations for each activity on a separate listing. The sum of all activity values shall equal the contract amount and, all Bid Items and Additives shall be separately identified, in accordance with the BIDDING SCHEDULE. Bid Items may include multiple activities, but activities may only be assigned to one such Bid Item. All of the data listed in this Subpart 6 shall be provided and the RMS CQC module shall be completed to the satisfaction of the Contracting Officer prior to any contract payments (except payments for bonds, insurance and/or mobilization as approved by the Contracting Officer) and shall be updated as required.
- (6) Required Quality Control tests (as applicable) tied to individual activities. The QC Reports/QC Requirements function of the RMS QC Module will be used to meet the requirements for tracking of verification and acceptance testing specified in the paragraph titled "Content of the CQC Plan".
- (7) Submittal information relating to specification section, bid item number, description, activity number, review period and expected procurement period
- (8) User schooling information (as applicable).

The above items shall be incorporated into the required submittal for the Contractor's Quality Control Plan required in the paragraph titled "QUALITY CONTROL PLAN" of this Section.

- a. During the course of the contract, the Contractor will receive various Quality Assurance comments from the Government that will reflect corrections needed to Contractor activities or reflect outstanding or future items needing the attention of the Contractor. The Contractor shall acknowledge receipt of these comments by specific number reference on its Daily CQC Report, and will also reflect on his Daily CQC Report when these items are specifically completed or corrected to permit Government verification. The contractor will use the QC COMMENTS function of the RMS QC Module to meet the requirements for tracking construction deficiencies as specified in paragraph titled, "Content of the CQC Plan".
- b. The Contractor's schedule system shall include, as specified and separate activities, all Preparatory Phase Meetings (inspections); all O&M Manuals (as applicable) and all Test Plans of Electrical and Mechanical Equipment or Systems that require validation testing or instructions to Contracting Officer Representatives (as applicable).

#### 3.6.5 Additional Preparatory and Initial Phases

Additional preparatory and initial phases may be conducted on the same definable features of work as determined by the Government if the quality of on-going work is unacceptable; or if there are changes in the applicable QC staff or in the on-site production supervision or work crew; or if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

#### 3.7 COMPLETION INSPECTION

#### 3.7.1 Punch Out Inspection

At the completion of all work the CQC system manager shall conduct an inspection of the work and develop a "punch list" of items which do not conform to the approved plans and specifications. Such a list of deficiencies shall be included in the CQC documentation, as required by paragraph "DOCUMENTATION" below, and shall include the estimated date by which the deficiencies will be corrected. The CQC system manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final Inspection.

#### 3.7.2 Pre-Final Inspection

The Government will perform this inspection to verify that the facility is complete and ready to be occupied, A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

#### 3.7.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at this inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptable complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

#### 3.8 DOCUMENTATION

The Contractor shall maintain Daily Inspection Report of quality control operations, activities, and tests performed, including the work of subcontractors. These records shall be on an acceptable form and shall include factual evidence that required quality control activities and/or tests have been performed, including but not limited to the following:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed today, giving location, description, and by whom. For dredging projects, the report shall always include the character and types of materials removed. Whenever there is a significant change in the materials, the location of such change shall be included in the reports.
- d. Control activities performed with results and references to specifications/plan requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
- e. Identify submittals reviewed, with contract reference, by whom, and action taken.
- f. Off-site surveillance activities, including actions taken.
- g. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- $\ensuremath{\text{h.}}$  List instructions given/received and conflicts in plans and/or specifications.
- i. Contractor's verification statement.
- j. These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement

that the workmanship complies with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date(s) covered by the report, except that reports need not be submitted for days on which no work is performed. All calendar days shall be accounted for throughout the life of the contract. The first report following a period of no work shall be for that day and all the no-work days since the last reported work day. Reports shall be sequentially numbered for this project, signed and dated by the CQC system manager. The report from the CQC system manager shall include copies of reports prepared by all subordinate quality control personnel.

#### 3.9 SAMPLE FORMS

Sample forms for the CQC Management Report, Preparatory Inspection Checklist, Initial Inspection Checklist, and other required reports and plans are enclosed in SECTION 01999. The Contractor shall tailor the checklists to include all reporting and quality control requirements specific to this project.

#### 3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor at the site of the work, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor or subcontractor.

-- End of Section --

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#### SECTION 01999

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#### SECTION 01999

LISTING OF ENCLOSED DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

#### PART 1 GENERAL

#### 1.1 ENCLOSURES

This Section contains documents referenced in other Sections of the specifications. They are consolidated in this Section for the convenience of the Contractor and the Government. The Contractor may reproduce the enclosed forms for it's use or obtain a supply of the forms from the Contracting Officer.

#### LIST OF ENCLOSED DOCUMENTS

CONSTRUCTION QUALITY MANAGEMENT REPORT - NCE FORM 63, 6 MAY 77. (2 Sides)

PREPARATORY INSPECTION CHECKLIST (3 SIDES)

INITIAL INSPECTION CHECKLIST (2 SIDES)

ACCIDENT PREVENTION PROGRAM ACTIVITY HAZARD ANALYSIS- NCE FORM 129, 6 JUNE 1986.

#### RESIDENT MANAGEMENT SYSTEM FORMS

- A. CURRENT ACTIVITY SYSTEM FORMS
- B. INTIAL INSPECTION WORKSHEET
- C. PREPARATORY INSPECTION WORKSHEET
- D. CONTRACTOR QUALITY CONTROL REPORT
- E. TRANSMITTAL SHEET (4025-R)

SUBMITTAL REGISTER - ENG FORM 4288, MAY 91

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATIONS OF COMPLIANCE ENG FORM 4025, MAY 91 (2 SIDES)

REPORT OF OPERATIONS - PIPELINE, DIPPER OR BUCKET DREDGES -ENG FORM 4 267, JAN 70 (2 SIDES)

NOTICE TO MARINERS FORM

OVERDEPTH AND TOLERANCE DRAWINGS

BENCHMARKS AND HORIZONTAL CONTROL DATA (To Be Provided with Request For Proposal)

GENERAL DECISION NO. IL030018

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --

# CONSTRUCTION QUALITY CONTROL MANAGEMENT

DATE			REPORT	
CONTRACTOR		CONTRACT NO.		
PROJECT NAME		LOCATION		
WEATHER TYPE	TEMP. MAX	MIN RAINFALL	GAGE READING_	
EMPLOYEES: SUPV	SKILLED	LABORERS	LENGTH OF SHIFT	HR
WORK RESPONSIBIL	ITY: NAME (PRIME	OR SUBCONTRACTOR) A	ND AREA OF RESPONSIBII	
A				
В				
C				
D				
E				
WORK PERFORMED TO		SCRIPTION, QUANTITY AND s on the Progress Chart or CF	D RESPONSIBILITY BY LETTE PM)	R REFERENCE
INSPECTION: (DESC EQUIPMENT INSPEC		ECTION AND LOCATION	I. INCLUDE OFF-SITE, MA	ATERIALS AND
A. PREPARATORY P	PHASE:			
B. INITIAL PHASE:				
C. CONTINUOUS PHA	ASE:			
RESULTS OF INSPEC	TION: (INCLUDE FI	NDINGS, DEFICIENCIES (	OBSERVED & CORRECTIVE	E ACTION)

SECTION 01999 Page

EDITION OF 22 JUNE 76 IS OBSOLETE

NCE FORM 63 6 MAY 77

RESULTS OF SURVEILLANCE CONTINUED:	
TEST PERFORMED: TYPE, LOCATION, RESULTS (ATTACH COPY OF TEST REPORT OR NOTATION	INCLUDING FAILURES & REMEDIAL ACTION, WHEN IT WILL BE FURNISHED.)
WORK ITEMS BEHIND SCHEDULE: REASON, EFF	ECT ON PROGRESS SCHEDULE AND ACTION TAKEN
	A DESCRIPTION OF THE PROPERTY
JOB SAFETY: (REPORT CONDITIONS, DEFICIENC	CIES, CORRECTIVE ACTION & RESULTS.)
REMARKS: LIST ATTACHMENT AND OTHER MA	NAGEMENT ACTIONS TAKEN TO ASSURE QUALITY
	IS ASSUMED THAT QUALITY CONTROL IS NOT BEING
IMPLEMENTED. THE ABOVE REPORT IS COMPLETE AND CORRECT AN WORK ARE IN COMPLIANCE WITH THE TERMS OF THE	ND ALL MATERIALS & SUPPLIES INCORPORATED IN THE IE CONTRACT EXCEPT AS NOTED:
_	
C	ONTRACTOR'S APPROVED REPRESENTATIVE SIGNATURE

# PREPARATORY INSPECTION CHECKLIST

CONTRACT NO:		DATE:	
TITLE:		SPECS	. SECTION:
MAJOR DEFINABLE SEGMENT	OF WORK:_		
A. PERSONNEL PRESENT:			
NAME	POS	SITION	COMPANY
1	-		:
2	7		
3	<u> 11</u>		/
4	¥-		:
5	-		
6			
7			
8	7		
9	-		
10	-		,
B. TRANSMITTAL INVOLVED:			
NUMBER & ITEM	CODE	CONTRACTO	R OR GOVERNMENT APPROVAL
1		g 2	
2		· ·	
3		g g	
4		· ·	
5			

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# PREPARATORY INSPECTION CHECKLIST

B-I. Have all items involved been approved	Yes	No
B-II. What item have not been approved?		
<u>ITEM</u> 1	STATUS	
2		
3		
4		
5		
C. Are all materials on hand?	Yes_	No
C-I. Are all materials on hand accordance with a	approvals? Yes_	No
C-II. Items not on hand or not in accordance wit	h transmittals:	
1		
2		
3		
4		
D. Test required in accordance with contract re-	quirements:	
		NT.
1	PARAGRAF	<u>'H</u>
2		
3.		

Page 2 of 3

# PREPARATORY INSPECTION CHECKLIST

	CCII	DENT FREVENTION FREFLANNING - HAZARD CONTROL MEASURES.
E-1	Appl	cable Outlines )Attach completed copies):
	1.	
	2.	
E-II		rational Equipment Checklist  ATTACHED FOR:
	1.	
		ON FILE FOR:
	1.	
	3.	

QUALITY CONTROL – PRIME CONTRACTOR

Page 3 of 3

# INITIAL INSPECTION CHECKLIST

CONTRACT NO:		DATE:		
Description and Location of Work	Inspected:			
	Specs. Se	ction:		
REFERENCE CONTRACT DRAV	WING:			
A. PERSONNEL PRESENT :				
NAME	POSITION	COMPANY		
2				
3				
4				
5	-			
6				
7	-			
8				
9				
10				
B. MATERIALS BEING USED A	RE IN STRICT COMPLIANCE V	VITH THE CONTRACT PLANS		
AND SPECIFICATION: YES	_ NO			
IF NOT,EXPLAIN:				

Page 1 of 2

# INITIAL INSPECTION CHECKLIST

C. PROCEDURES AND WORK METHODS W. THE REQUIREMENTS OF THE CONTRACT S IF NOT, EXPLAIN:	PECIFICATION	ONS: YES NO
D. WORKMANSHIP IS ACCEPTABLE: YES_IMPROVEMENT IS NEEDED:		
E. SAFETY VIOLATIONS AND CORRECTIVE	E ACTION TA	KEN:
	OUALITY	CONTROL REPRESENTATIVE

Page 2 of 2

# ACCIDENT PREVENTION PROGRAM ACTIVITY HAZARD ANALYSIS

Page of	3. Facility	6. Estimated Start Date	10 Precautionary Action Taken
	2. Project	5. Location	9 Safety Hazard
	1. Contract No.	4. Date 5.1	7 Ifem 8 Phase of Work

12. Report discussed with contractor/ superintendent on

11. Contractor (Signature & Date)

13. Contracting Officer (Signature & Date)

CECTION 01000 Dana



# **Current Activity Summary**

Project Name: Repair of North & South Piers, Baloney Harbor, MI Contract Number: DACW35-02-C-####

Location Name

Activity Number	Activity Description	QUANTITY	UNIT PRICE	AMOUNT
CLIN 0001	North and South Pier Repairs	1	\$3,437,787.18   LS	\$3,437,787.1
1001	Bonds			\$49,136.00
1002A	Prepare & Mobilize Equipment			\$94,864.00
1002B	Prepare Site			\$72,500.00
1002C	Office Trailers & Utilities			\$22,500.00
1003A	Demobilize Equipment			\$5,000.00
1003B	Site Restoration			\$2,500.00
1003C	As-Built Drawings			\$2,500.00
1004A	Furnish SSP			\$750,000.00
1004B	Furnish Special Piles			\$50,000.00
1004C	Furnish SSP Pile Shoes			\$30,000.00
1004D	Fabricate Template			\$6,000.00
1004E	Excavate Driving Line			\$100,000.00
1004F	Set & Drive SSP			\$500,000.00
1004G	Backfill Driving Line			\$50,000.00
1004	South Driving Line Obstruction Removal			\$117,787.18
1005A	Furnish Misc. Steel			\$193,000.00
1005B	Furnish Tie-Rods			\$20,000.00
1005C	Furnish Plate Washers			\$15,000.00
1005D	Furnish Fastners			\$12,000.00
1005E	Place Misc. Steel			\$280,000.00
1006A	Demo Concrete & Remove (Rubblemound)			\$100,000.00
1006B	Excavate Existing Cribs (Rubblemound Area)			\$185,000.00
1006C	Disposal of Demo Materials (Rubblemound Area)			\$25,000.00
1007A	Furnish H-Pile Materials			\$22,800.00
1007B	Install H-Piles			\$27,200.00
1008A	Furnish Rebar			\$135,000.00
1008B	Place Concrete (2000 CY @ \$250.00/CY)			\$500,000.00
1009A	Furnish Handrails			\$60,000.00
1009B	Place Handrails			\$7,000.00
1009C	Paint Handrails			\$3,000.00
				\$3,437,787.18
CLIN 0002	Fill Stone:	0	\$0.00 / NA	\$0.00
	No Activities Assigned		*** ** ***	A 40 F 000 04
CLIN 0002AA	First 18,000 tons	18,000	\$22.50 / TN	\$405,000.00
2001	Furnish & Place Fill Stone - 1st 18,000 Tons			\$405,000.00
			2221112	\$405,000.00
CLIN 0002AB	Over 10,000 tons	2,000	\$22.50 / TN	\$45,000.00
2101	Furnish & Place Fill Stone - Over 18,000 Tons			\$45,000.00
	WATER ST.		F-20 V/A 57-20 A	\$45,000.00
CLIN 0003	Underlayer Stone:  No Activities Assigned	0 d to this Bid Item	\$0.00 I NA	\$0.00
CLIN 0003AA	First 4,500 Tons	4,500	\$31.50   TN	\$141,750.00
3001	Furnish & Place Underlayer Stone - 1st 4,500 Tons		ASSESSED AND AND ADDRESS OF THE PARTY OF THE	\$141,750.00
				\$141,750.00
CLIN 0003AB	Over 4,500 tons	450	\$31.50 / TN	\$14,175.00
3101	Furnish & Place Underlayer Stone - Over 4,500 Tons	101111111111111111111111111111111111111	water and date	\$14,175.00
en Sell	ormover ಮುಗ್ರಾಮದ ಕಾಗುಕಾರಗಳು ನಾವಾಗಿಕ ಕರೆತು ಗಿತ್ತರ ಕಿತ್ರಿಗಿ			\$14,175.00
CLIN 0004	Scour Stone:	0	\$0.00 I NA	\$0.00



# **Current Activity Summary**

08 Jul 2002

Project Name: Repair of North & South Piers, Baloney Harbor, MI Contract Number: DACW35-02-C-####

Location Name

Activity Number	Activity Description	QUANTITY	UNIT PRICE	AMOUNT
CLIN 0004	Scour Stone: (Continued)	0	\$0.00 / NA	\$0.00
	No Activities Assig	ned to this Bid Item.		
CLIN 0004AA	First 3,500 tons	3,500	\$27.50 / TN	\$96,250.00
4001	Furnish & Place Scour Stone - 1st 3,500 Tons			\$96,250.00
				\$96,250.00
CLIN 0004AB	Over 3,500 tons	600	\$27.50 I TN	\$16,500.00
4101	Furnish & Place Scour Stone - Over 3,500 Tons			\$16,500.00
				\$16,500.00
CLIN 0005	Bedding Stone:	0	\$0.00 / NA	\$0.00
	No Activities Assig	ned to this Bid Item.		
CLIN 0005AA	First 3,000 tons	3,000	\$28.00 / TN	\$84,000.00
5001	Furnish & Place Bedding Stone - 1st 3,000 Tons			\$84,000.00
				\$84,000.00
CLIN 0005AB	Over 3,000 tons	600	\$28.00 / TN	\$16,800.00
5101	Furnish & Place Bedding Stone - Over 3,000 Tons			\$16,800.00
				\$16,800.00
CLIN 0006	Armor Stone:	0	\$0.00 I NA	\$0.00
	No Activities Assig	ned to this Bid Item.		
CLIN 0006AA	First 6,000 tons	6,000	\$34.00 / TN	\$204,000.00
6001	Furnish & Place Armor Stone - 1st 6,000 Tons			\$204,000.00
				\$204,000.00
CLIN 0006AB	Over 6,000 tons	825	\$34.00 / TN	\$28,050.00
6101	Furnish & Place Armor Stone - Over 6,000 Tons			\$28,050.00
				\$28,050.00

Sum of CLINs \$4,489,312.18 \$4,489,312.18 **Sum of Activities** Difference

# North & South Pier Repair, Baloney Harbor, MI DACW35-02-C -#### Grand Haven Area Office

#### INITIAL INSPECTION WORKSHEET

#### DEFINABLE FEATURE OF WORK: Site Cast Concrete

# A. ACTIVITIES INCLUDED UNDER Site Cast Concrete -

ABC Company, Inc

1008A Furnish Rebar

Place Concrete (2000 CY @ \$250.00/CY)

\$135,000.00 \$500,000.00

\$635,000.00

#### **B. QUALITY CONTROL REQUIREMENTS -**

SORWI	HALSK	EQUIKED -	
	00700	1	S

1008B

00700	1	SF 1413 for Subcontracts		Not submitted
03250	1	Expansion Joint Materials	_A	Approved
03307	1	Batching and Mixing Equipment	F	Receipt
03307	2	Conveying and Placement Equipment	F	Receipt
03307	3	Reinforcing Steel (Mat Steel, Bar Steel	A	Approved
03307	4	Concrete Mixture Proportions;	A	Approved
03307	5	Cementitious Material	Α	Approved
03307	6	Aggregates	A	Approved
03307	7	Manufacturer's Literature	Α	Approved
03307	8	Batching & Mixing Equipment - Redi-Mix	F	Receipt
03307	9	Conveying & Placing Equipment - Redi-Mix	F	Receipt
03307	10	Concrete Mix Proportions - Redi-Mix	Α	Approved
03307	11	Cementitious Material - Redi-Mix	A	Approved
03307	12	Aggregates - Redi Mix	A	Approved
03307	13	Manufacturer's Data; AEA - Redi-Mix	A	Approved
03307	14	Manufacturer's Data; WRA - Redi-Mix	A	Approved
05500	2	Welders	F	Receipt
05552	4	Mill Certs - Ladder Grab Rails	Α	Approved

#### QC TESTS -

CT # 00001	Obtain 1 Cylinder for strength testing at 7 days and 2 Cylinders for 28 days. Minimum of	Not Performed
	one set per day or 1 set per eveny 150 CV placed (ASTM C-94)	10

one set per day or 1 set per every 150 CY placed. (ASTM C-94) Required strength at 7 Days = 2,800 p.s.i.; 28 Days = 4,000 p.s.i.

Check Batch slips for water/cement ratio not to execeed 0.40 by weight Not Performed CT # 00002

CT # 00003 Check Slump at both mixer and discharge ends: Pumped = 3" - 7" at discharge

Maximum of 5" at Mixer if no admixture used Maximum of 7" at mixer if admixture is used

2 checks per shift is minimum required

CT # 00004 2 Air Content tests required per shift. Check approved mix design for maximum and

minimum values acceptable.

#### Not Performed

Not Performed

#### C. QA/QC PUNCH LIST ITEMS -

#### North & South Pier Repair, Baloney Harbor, MI DACW35-02-C-#### Grand Haven Area Office

# **INITIAL INSPECTION WORKSHEET**

	DEFINABLE FEATURE OF WORK : Site Cast Concrete	
C. 0	QA/QC PUNCH LIST ITEMS - Cont. INCLUDE ADDITIONAL COMMENTS ON DAILY REPORT	
D. L	ABOR RATES -	
	LABOR BASIC FRINGE PLUS TOTAL CLASSIFICATIONS RATE BENEFITS % WAGE/HE	t.
E. II	NSPECTION CHECKS -	N COMPLIANCE
1. 2. 3. 4. 5.	Check rebar for proper bar sizes, per approved shop drawings.  Check for 3" clearance of rebar from form sides and top surface.  Check for proper use of concrete vibrators  Check for correct finish elevations.  Concrete finish shall meet approval of on-site Government Representative. Make sure all finshers are aware of approved finishing method and degree of brooming.  Ensure embedded items are not displaced during placement and finishing of the concrete.	Yes/ No/ NA
8.		
o.		
	OB SITE SAFETY -	N COMPLIANCE Yes/ No/ NA
5 6 7 8		
	QA Evaluation Notes -	DISCUSSED Yes/ No/ NA
1 2 3 4		

#### North & South Pier Repair, Baloney Harbor, MI DACW35-02-C-#### Grand Haven Area Office

# PREPARATORY INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK: Site Cast Concrete

	DELINABLE	FEATORE OF	WORK . Site Casi	Concrete		
A. ACTIVITIES IN	ICLUDED UNDER S	ite Cast Con	crete -			
ABC Company, Inc	2.					
1008A 1008B	Furnish Rebar Place Concrete (	2000 CY @ \$25	0.00/CY)		\$135,000.00 \$500,000.00	
					\$635,000.00	
B. QUALITY COM	ITROL REQUIREME	NTS -				
SUBMITTALS REQUIRED  00700 1  03250 1  03307 1  03307 2  03307 3  03307 4  03307 5  03307 6  03307 7  03307 8  03307 9  03307 10  03307 11  03307 12  03307 12  03307 13  03307 14  05500 2  05552 4  C. QA/QC PUNCI	SF 1413 for Subcontr Expansion Joint Materials Batching and Mixing Equ Conveying and Placemer Reinforcing Steel (Mat Si Concrete Mixture Proport Cementitious Material Aggregates Manufacturer's Literature Batching & Mixing Equipic Conveying & Placing Equ Concrete Mix Proportions Cementitious Material - F Aggregates - Redi Mix Manufacturer's Data; AE Manufacturer's Data; WR Welders Mill Certs - Ladder Grab III	ipment it Equipment teel, Bar Steel tions;  ment - Redi-Mix ipment - Redi-N s - Redi-Mix Redi-Mix A - Redi-Mix Rails		AFFAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Not submitted Approved Receipt Receipt Approved Approved Approved Approved Approved Receipt Receipt Approved	
D. LABOR RATE	S -					
LABO CLASSIFIC		BASIC RATE	FRINGE BENEFITS	PLUS %	TOTAL WAGE/HR	

12 Jul 2002

North & South Pier Repair, Baloney Harbor, MI DACW35-02-C-#### Grand Haven Area Office

# PREPARATORY INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK: Site Cast Concrete

E. REVIEW CONTRACT DRAW	WINGS AND SPECIFICATIONS -	
DRAWING / SPEC. NO	COMMENTS / CONFLICTS	
		_
		DISCUSSED
1		Yes/ No/ NA
3. 4.		
E DEDETITIVE DESIGNACIE	S FOUND ON PREVIOUS PROJECTS -	
T. REPETITIVE DEFICIENCIE	S FOUND ON FREVIOUS PROJECTS -	DISCUSSED Yes/ No/ NA
1		
3.		
G. INSPECTION CHECKS -		
		IN COMPLIANCE Yes/ No/ NA
1		
4.		===
II IOD SITE CAFETY		
H. JOB SITE SAFETY -		IN COMPLIANCE
1		Yes/ No/ NA
3. 4.		
I. QUALITY ASSURANCE EVA	ALUATION NOTES -	
		DISCUSSED Yes/ No/ NA
1		
3. 4.		
3. 4.		

#### REPORT NUMBER CONTRACTORS QUALITY CONTROL REPORT (QCR) Page 1 of 2 92 DAILY LOG OF CONSTRUCTION - CIVIL DATE 22 Jun 2001 - Friday PROJECT CONTRACT NUMBER North & South Pier Repair, Baloney Harbor, MI DACW35-02-C-#### NA CONTRACTOR WEATHER Weather Caused No Delay ABC Company, Inc. 555 Imagination Road, Fantasy, MI 49494 Temperature Min 80 °F, Max 63 °F; 0.01 IN Precipitation; 10 MPH Wind **QC NARRATIVES Activities in Progress:** Set and drove 24 sheets of SSP Installing Miscellaneous Steel Waler sections c/s 4+00W to 4+50W 123 Tons of Fill stone placed between existing structure and req'd SSP wall from c/s 6+25 W to 6+75W. Safety Inspection / Safety Meetings: Weekly Safety Meeting held today - Use of PPE - Hrad hats & Work Vests PREP/INITIAL DATES (Preparatory and initial dates held and advance notice) A preparatory inspection was held today for the following feature: Miscellaneous Steel & Handrail An initial inspection was held today for the following feature: Miscellaneous Steel & Handrail **ACTIVITY START/FINISH** The following activity was started today: Activity No Description Furnish & Place Fill Stone - 1st 18,000 Tons No activities were finished today QC REQUIREMENTS The following 4 QC requirements were completed today: Requirement No Type Results QC Testing CT-00001 Check Plumbness of piles during driving Completed CT-00002 QC Testing Check horizontal placement of piling (Check for Pile-Walk) Completed CT-00003 QC Testing Check vibratory hammer driving rate for SSP - 12"/minute is the minimum rate. If Completed exceeded, switch to Impact hammer. CT-00004 QC Testing Video Tape Interlocks of piling after driving SSP Completed QA/QC PUNCH LIST (Describe QC Punch List items issued, Report QC and QA Punch List items corrected) The following QC Punch List item was issued today: Item No Location Description QC-00001 4+25W Cut-off sheets to finish grade from 4+00W to 4+50W No Punch List items were corrected today CONTRACTORS ON SITE (Report first and/or last day contractors were on site) No contractors had their first or last day on site today LABOR HOURS The following labor hours were Reported today: Number of Hours Labor Classification Worked Employees **IRONWORKER** 3.0 10.0 PILE DRIVING SETTER 2.0 10.0

	QUALITY CONTROL		REPOR 92 DATE	RT NUMBER	Page 2 of 2
DAILY LOG	OF CONSTRUCTION	- CIVIL	127 PARTITION	un 2001 - Frid	ay
PROJECT North & South Pier R	epair, Baloney Harbor, MI			RACT NUMBER CW35-02-C-##	##
ABC Company, Inc. Total hours worked to date:	PILE DRIVER OPERATOR 30.0	2	Total	1.0	10.0 30.0
EQUIPMENT HOURS					
The following equipment he	ours were Reported to	dav:		Standby	Operating
Equipment ID	Description			Hours	Hours
00000002	Vibratory Hammer			0.0	10.0
00000003	Arc Welder			0.0	8.0
00000004	Crane - 100' Boom		<b>-</b>	0.0	10.0
Total operating hours to date	e: 28.0		Total	0.0	28.0
A PARTICIPATION OF THE PARTY OF	ribe accidents)		_		
No accidents reported toda	У				
CONTRACTOR CERTIFICATION	n behalf of the contract	tor. I certify that this R	eport is complete	and correct a	nd all equipment an
ONTRACTOR CERTIFICATION O	n behalf of the contract	tor, I certify that this Re	eport is complete a	and correct a	nd all equipment an
m	aterial used and work	performed during this	Reporting period a	re in compli	ance with the contra
m	n behalf of the contract naterial used and work lans and specifications	performed during this	Reporting period a	re in compli noted above	ance with the contra

-	TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL MANUFACTURER'S CERTIFICATES OF COMPLIANCE	MENT DATA, MATERIAL ATES OF COMPLIANCE	ERIAL SAMPLES, OR ANCE	DATE	06/06/2002		I KANSMII I AL NO 02486	02486-37.2	
	(Read instructions on the reverse side prior to initiating this form)	de prior to initiating this	form)						
	SECTION I - REQUEST	FOR APPROVAL O	SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS	(This sec	(This section will be initiated by the contractor)	tiated by the c	ontractor)		
70: Gra 307 P. C	Grand Haven Area Office 307 South Harbor Street P. O. Box 629 Grand Haven, MI 49417	FROM: ABC Company, Inc 555 Imagination Par Fantasy, MI 49494	ABC Company, Inc 555 Imagination Park Road Fantasy, MI 49494	CONTRACT NO. DACW35-0	NTRACT NO. DACW35-02-C-### NA	NA	CHECK ONE: THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL OF TRANSMITTAL	ECK ONE. THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF THANSMITTAID2486-37.1	OF 1
SPECIFICA transmittal)	SPECIFICATION SEC. NO. (Cover only one section with each transmittal) 02486	PROJECT TITLE AND LOCATION	LOCATION				CHECK ONE: THIS TRANSMITTAL IS FOR X FIO COVT. APPROVA	IIS TRANSMITTAL IS  GOVT. APPROVAL	AL IS ROVAL
ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model numberietc.)	٥	MFG OR CONTR.	NO.	CONTRACT	CONTRACT REFERENCE DOCUMENT	CONTRACTOR	VARIATION (See	FOR
			BROCHURE NO. (See instruction no. 8)	COPIES	SPEC. PARA. NO.	DRAWING SHEET NO.	200	No. 6)	CODE
a.	Production Test Results		DATA	. 6	3.2.3.4	ż	ń	1	. 11
REMARKS					I certify that the in detail and a contract draw stated.	he above subm are correct and ings and speci	Certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.	been reviewed formance with as otherwise	the second secon
		SECTIC	SECTION II - APPROVAL ACTION						
NCLOS	ENCLOSURES RETURNED (List by item No.)	Ž	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	PROVING AL	ЛНОВІТУ		DATE		
NG FOR	ENG FORM 4025-R, MAR 95		EDITION OF SEP 93 IS OBSOLETE.		SHEET 1 OF 1	F1		(Propone	(Proponent: CEMP-CE)

PROVAL MATERIAL BY BY (h) (i)	SUB	MITTAL	SUBMITTAL REGISTER	ER	TOR					
C T CONTRACTOR: SCHEDULE DATES SCHEDULE DATES S R A A O S R C T A O S R C T A O C T A O C T A O C T A O C T A O C T A O C T C T A O C T A O C T A O C T C T A O C T A C T C T A O C T	FALO	HARBOR,		200	5				L	
C T T L A S R R S R R R APPROVAL MATERIAL C C C C C C C C C C C C C C C C C C C			C	Sco	CONTRACTOR	R: TES	CON	CONTRACTOR		
(e) (f) (g) (h) (f) (f) (g) (g) (g) (g) (g) (g) (g) (g) (g) (g		T ← C ← C C ← C T ±		SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	40H-0Z 000m	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	AATE FWC TO APPR TO ADTH TO ADTH FROM CONTR
1.5.8 1.5.11.2 1.5.10.1 1.5.10.1 1.5.11.2 1.1.3 1.1.3		(e)	(j)	(6)	(h)	(0)	6	(k)	٥	0
1.5.8 1.5.11.2 1.5.2 1.5.10.1 1.5.11.2 1.1.3 1.5 3.2	ittals									
1.5.8 1.5.11.2 1.5.2 1.5.10.1 1.5.11.2 1.1.3 1.5 1.5			G AOF							
1.5.11.2 1.5.2 1.5.10.1 1.5.11.2 1.1.3 1.5 1.5		1.5.8	G AOF							
1.5.2 1.5.10.1 1.5.11.2 1.1.3 1.5		1.5.11.2	G AOF							
1.5.10.1 1.5.11.2 1.1.3 1.5 1.5		1.5.2								
1.1.3		1.5.10.1								
1.1.3		1.5.11.2								
1.5	ts	1.1.3	G RED							
1.5	ittals									
3.2	an	1.5	G ECD							
	ittals									
		3.2	G AOF							

SD-01 Preconstruction Submittals

01100

(0)

(p) (B) Utility Location Plan Traffic Control Plan

TEM SUBMITTED

zo

zo

DESCRIPTION

одшо ошон

-AASOZ-FFAJ

<0-->-->

SD-01 Preconstruction Submittals

01130

Additional Real Estate Rights

**Buoy Relocation Position** 

Survey Information

Survey Note Format

Notice to Mariners

SD-01 Preconstruction Submittals Environmental Protection Plan

01451

G AOF

3.4.1

SD-08 Manufacturer's Instructions

Quality Control Plan

SD-09 Manufacturer's Field

Reports

CQC System Manager

3.6.1 3.6.2

Preparatory Inspection Checklist

Initial Inspection Checklist

Daily Inspection Report

3.8

SD-01 Preconstruction Submittals Sounding Equipment Description

02482

REMARKS

DATE RCD FRM APPR AUTH

DATE OF ACTION

0001

DATE RCD FROM OTH REVIEWER

DATE FWD I TO OTHER P REVIEWER F

MAILED TO CONTR/

KO--OZ

APPROVING AUTHORITY

FY03 MAINTENANCE DREDGING NEW BUFFALO HARBOR,

TITLE AND LOCATION

CONTRACT NO

Ξ

(b)

(d)

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PAGE 1 OF 2 PAGES

G AOF

1.4

Dredging, Conveyance and

Placement Plan

and Calibration Data

3.3.1

Dredging Placement Safety Plan

Notice of Start of Dredging

G AOF

03 N	TITLE AND LOCATION		MINITED IN THE	SUBMILIAL REGISTER	×					*	CONTRACTINO	ó				
	MAINTE	TITLE AND LOCATION FY03 MAINTENANCE DREDGING NEW BUFFALO HARBOR,		M	CONTRACTOR	TOR										
				O	SCI	CONTRACTOR: SCHEDULE DATES		CONTR	CONTRACTOR		APPRO	APPROVING AUTHORITY	ORITY			
HEKZNZ-HHKJ ZO	отшо ошо⊢	DESCRIPTION	σ∢α∢αα∢σι #	0>+ 0	SUBMIT	APPROVAL MATERIAL NEEDED NEEDED BY BY		V − − 0 × 0 − 4 0 × 0 − 4 0 × 0 − 4 0 × 0 − 4 0 × 0 − 4 0 × 0 − 4 0 × 0 − 4 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0	DATE DO OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD [FROM]	DATE FWD DATE RCD TO OTHER FROM OTH REVIEWER	5	ED DA ACTO	DATE DATE DATE ACTION	MAILED TO CONTR! DATE RCD FRM APPR AUTH	REMARKS
(a) (b)	(0)	(p)	(e)	(1)	(6)	(£)	(i)	6	(K)	ω	(m)	(u)	(0)	(d)	(a)	(L)
		Sounding Records SD-06 Test Reports Daily Report of Dredging Operations														

PAGE 2 OF 2 PAGES

(Read instructions on t.	NOFACTORER'S CENTIFICATES OF COMPLIAN (Read instructions on the reverse side prior to initiating this form)	MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)							
SECTION I – R	REQUEST FOR APPR	SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS	NG ITEMS (This so	ection will be	(This section will be initiated by the contractor)	ne contractor)			
ТО:	FROM:			CONTRACT NO:	T NO:	<u>ош</u>	CHECK ONE: THIS IS A NEW THIS IS A RESU TRANSMITTAL	ECK ONE: THIS IS A NEW TRANSMITTAL THIS IS A RESUBMITTAL OF TRANSMITTAL.	
SPECIFICATION SEC. NO (Cover only one section with each transmittal)		PROJECT TITLE AND LOCATION	z						
	DISCRIPTION OF ITEMS SUBMITTED (Type size, model numberlete.)		MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. DRAWING PARA. NO. SHEET NO.	EFERENCE IENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (see Instruction No. 6)	FOR CE USE CODE
ri ri	Ъ,		(See instruction no. 8)	Ġ.	ú	f	sù	ž	
REMARKS					I certify in detail contract	that the above and are correct drawings and	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.	e been reviewed nance with the as otherwise stated	
					ļ	NAME AN	NAME AND SIGNATURE OF CONTRACTOR	OF CONTRACT	OR
		SECTION II - APPROVAL ACTION	AL ACTION						
ENCLOSURES RETURNED (List by Item No.)		NAME, TITL	NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY	E OF APPR	OVING AUTE	HORITY		DATE	
ENG FORM 4025, MAY 91 (ER 415-1-10)	EDITION	EDITION OF AUG 89 IS OBSOLETE.	S	SHEET	OF		(Propor	(Proponent: CEMP-CE)	

# INSTRUCTIONS

- Section I will be initiated by the Contractor in the required number of copies.
- number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial well as the new submittal number. ri
- The "Item No." will be the same "Item No." as indicated on ENG FORM 4288 for each entry on this form.
- 4. Submittals requiring expeditious handling will be submitted on a separate form.
- 5. Separate transmittal form will be used for submittals under separate sections of the specifications.
- A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specification -- also, a written statement to that effect shall be included in the space provided for "Remarks". 6.
- 7. Form is self-transmittal, letter of transmittal is not required.
- When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I. ∞
- addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In in Section I, column g, to each item submitted. 6

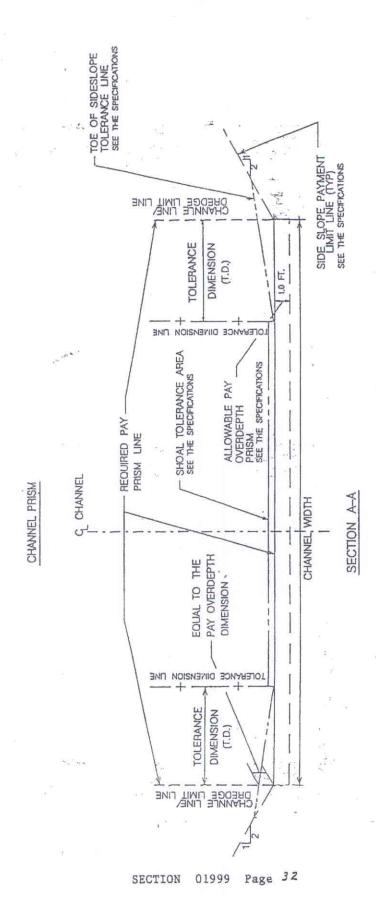
# THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

<ul> <li>A Approved as submitted.</li> </ul>	E Disapproved (see attached)
B Approved, except as noted on drawings.	F - Receipt acknowledged
<ul> <li>C Approved, except as noted on drawings</li> <li>Refer to attached sheet resubmission required.</li> </ul>	FX Receipt acknowledged, does not comply as noted with contract requirements
D Will be returned by separate correspondence.	G Other (Specify)

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

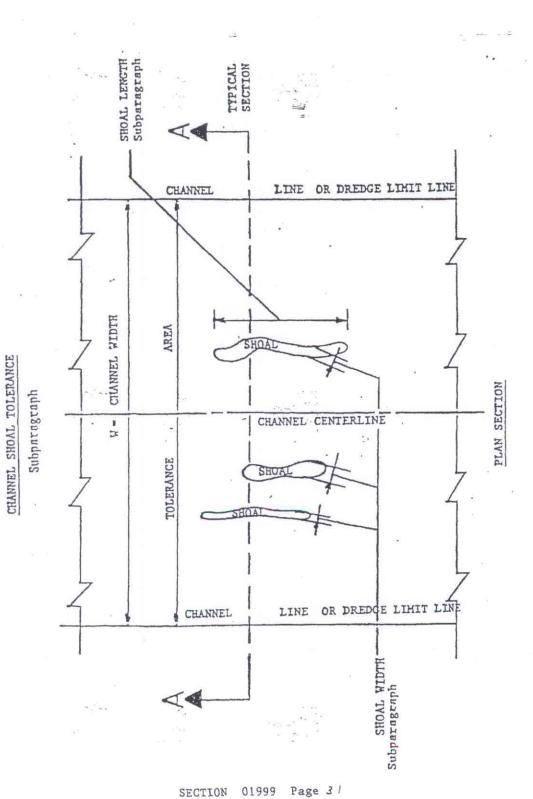
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AND BAR	LOCATION (include	e statio	n numbe	rs)										
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FUEL (aii)   BBLS	COMMODITIES						min.
LUBRICANT (grease)  WATER  GAL  WATER  GAL  WATER  GAL  PLANT OWNERSHIP COSTS (Actual for F.Y. reporting period).  DEPRECIATION  REPAIRS (Adjusted)  CESSATION OF WORK  SUBSISTENCE SUPPLIES  MISCELLANEOUS SUPPLIES  TOTAL  TOTAL  REMARKS  (End of F.Y. reporting period).  PLANT OWNERSHIP COSTS (Actual for F.Y. reporting period).  CESSATION OF WORK  SMALL TOOLS, ETC  TOTAL  TOTAL  TOTAL  REMARKS	FUEL (oil)	BBLS				(End of F.Y. reporting period)	
LUBRICANT (grease)  WATER  GAL  WATER  GAL  PLANT OWNERSHIP COSTS (Actual for F.Y. reporting period): DEPRECIATION		GAL	-				
WATER GAL PLANT OWNERSHIP COSTS (Actual for F.Y. reporting period): DEPRECIATION	LUBRICANT	LBS					
SUBSISTENCE SUPPLIES		CAL				PLANT OWNERSHIP COSTS	
SUBSISTENCE SUPPLIES	WATER	GAL					
SUBSISTENCE SUPPLIES						REPAIRS (Adjusted)	
MISCELLANEOUS SUPPLIES						CESSATION OF WORK	
MISCELLANEOUS SUPPLIES						SMALL TOOLS, ETC.	
TOTAL	MISCELLANEOU	JS				1	
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ture)	SUBMITTED BY	(Name,	title, and	signature)		ENDED BY (Name, title, and signa- APPROVED BY (Name, ti	tle, and signature)
					(are)		



NOTE: THE EXISTING CHANNEL BOTTOM IS NOT SHOWN

See the Subparagraph "Overdepth and Tolerances" SECTION 02482 "DREDGING"



## NINTH DISTRICT LOCAL NOTICE TO MARINERS GENERAL NOTICE ENTRY FORM

1. NAME OF COMPANY:	
2. TYPE OF OPERATION:	
3. LOCATION:	
4. COMMENCE DATE:	_ COMPLETE DATE:
5. HOURS OF OPERATION:	TO:
6. DAYS OF OPERATION:	TO:
7. NAME OF CONTACT VESSEL:	
8. VHF - FM CHANNELS MONITORED:	
9. SPECIAL REQUIREMENTS/REMARKS:	
10. FOR FURTHER INFORMATION CONTACT:	
11. TELEPHONE #:	
12. SIGNATURE:	DATE:

"NOTE"

TEMPORARY MOORING BUOYS ARE REQUIRED TO BE WHITE WITH A BLUE HORIZONTAL BAND AROUND THE CIRCUMFERENCE OF THE BUOY AND THE WATER LINE. FOR MORE DETAILS CONCERNING REGULATIONS OF MOORING BUOYS REFER TO 33 CODE OF FEDERAL REGULATION PART 66,10-45. A COLOR DEPICTION OF A MOORING BUOY CAN BE FOUND I THE LIGHT LIST VOL. VII GREAT LAKES 1989 (PLATE 4).



### General Decision Number IL030018

Minnesota:

Class I

General Decision Number IL030018 Superseded General Decision No. IL020018 State: Illinois Construction Type: DREDGING MARINE County(ies): STATEWIDE ILLINOIS, INDIANA, MICHIGAN, MINNESOTA, NEW YORK, OHIO, PENNSYLVANIA AND WISCONSIN DREDGING AND MARINE CONSTRUCTION Dredging and Marine Construction Projects: floating/land equipment engaged in clamshell, backhoe and dragline dredging, marine construction, bridges, salvage operations and cranes, loaders, dozers, or other equipment used for disposal of dredge spoils or marine construction materials on land at the slip or dock, at the project site, where the above material/spoils is being handled, and all equipment utilized on breakwall/breakwate structures on the Great Lakes, Islands therein, their connecting and tributary waters, including the Illinois Waterway to the Loc at Lockport, Illinois, the New York State Barge Canal System between Tonawanda, New York and Waterford, New York and Oswego, New York, the Duluth-Superior area to the Fond du Lac Bridge Crossing (Minnesota State Highway 23) on the St. Louis River and on the St. Lawrence River eastward to the International Boundary near St. Regis, New York. Modification Number Publication Date 06/13/2003 COUNTY (ies): STATEWIDE SUIL2001A 01/01/2003 Rates Fringes MECHANICAL DREDGING (CLAMSHELL, DRAGLINE, AND BACKHOE) AND MARINE CONSTRUCTION): FLOATING EQUIPMENT: Indiana: Class I 34.60 11.55+b&c Class II 33.10 11.55+b&c Class III 29.45 11.55+b&c Class IV 24.50 11.55+b&c Illinois: Class I 38.35 11.55+b&c Class II 36.85 11.55+b&c Class III 32.80 11.55+b&c Class IV 27.30 11.55+b+c Michigan: Class I 26.75 14.58+b&c Class II 14.58+b&c 25.25 Class III 14.58+b&c 22.50 Class IV 18.70 14.58+b&c

31.75

8.45+b&c

Class II	30.25	8.45+b&c
Class III	26.95	8.45+b&c
Class IV	22.40	8.45+b&c
New York:		
(Cattaraugus, Chautauga,		
Erie and Orleans Counties):		
Class I	26.96	13.56+b&c
Class II	25.46	13.56+b&c
Class III	22.66	13.56+b&c
Class IV	18.85	13.56+b&c
(Cayuga, Jefferson, Oswego,		
and St. Lawrence Counties):	72712 - 12 1 2 1	Valoritaria carvotum
Class I	25.30	8.85+b&c
Class II	23.80	8.85+b&c
Class III	21.20	8.85+b&c
Class IV	17.65	8.85+b&c
(Niagara): Class I	24 22	11 00 1-
Class II	24.90 23.40	11.90+b&c 11.90+b&c
Class III	20.80	11.90+b&c
Class IV	17.30	11.90+b&c
(Monroe and Wayne Counties	17.30	11.90+D&C
and the City of Rochester):		
Class I	27.50	9.00+b&c
Class II	26.00	9.00+b&c
Class III	23.15	9.00+b&c
Class IV	19.25	9.00+b&c
Ohio:		
(Ashtabula, Cuyahoga, Erie,		
Lake, and Lorain Counties:		
Class I	32.36	7.10+b&c
Class II	30,86	7.10+b&c
Class III	27.47	7.10+b&c
Class IV	22.84	7.10+b&c
(Lucas, Henry, Ottawa,		
Wood and Sandusky		
Counties:		
Class I	30.65	7.10+b&c
Class II	29.15	7.10+b&c
Class III	25.95	7.10+b+c
Class IV	21.58	7.10+b&c
Pennsylvania:		
(Erie County):		
Class I	24.57	8.74+b&c
Class II	23.07	8.74+b&c
Class III	20.67	8.74+b&c
Class IV	17.77	8.74+b&c
Wisconsin:	a riawle an muada	ata in the
Includes all marine/floating typ Superior/Duluth Harbor, Lake Sup		cts in the
Class I	31.65	12.30+b&c
Class II	30.15	12.30+b&c
Class III	26.85	12.30+b&c
Class IV	22.35	12.30+b&c
HYDRAULIC DREDGING:		11111111111
TUG OPERATOR - Vessel Over 800	Horse-	
Power 26.49	7.61	+a+b
LAUNCH OPERATOR - Vessel 800 Ho	rse-	
Power Or Less 25.15		+a+b
TUG ENGINEER	26.49	7.61+a+b

```
Fireman, Lineman, Oiler,
 Deckhand, Tankerman. Scowman, (on/or
 with tugboats, launches,
 or other self-propelled
 boats)
                                 22.51
                                                7.61+a+b
DREDGE WORKERS:
 Lead Deckhand
                                 29.68
                                                7.61+a+b
 Fireman, Oiler, Deckhand, &
 Scowman (with dipper, hydraulic
 or other floating equipment engaged in
 hydraulic and dipper dredging operations)
 Pipeline men, (both afloat & ashore including
 loading, unloading, maintaining, and handling
 pipelines for hydraulic dredges and sandboats)
 Rangeman, Tankerman, Sweepman and service
 Truck Driver
                                                7.61+a+b
PAID HOLIDAYS (WHERE APPLICABLE):
A- NEW YEAR'S DAY, B- MEMORIAL DAY, C- INDEPENDENCE DAY, D-LABOR
DAY, E- THANKSGIVING DAY, F- CHRISTMAS DAY, G- PRESIDENT'S
DAY, H- VETERAN'S DAY.
FOOTNOTES:
a. $30.10 per day per employee for mecical
b. Eight paid holidays: A thru H
c. Hazardous/Toxic Waste Material:
  *Level A $2.50 per hour
  *Level B 2.00 per hour
  *Level C 1.00 per hour
  *Level D 0.50 per hour
 Such wages shall be above the classifications of work
 listed under mechanical dredging and Marine construction
 of this general wage decision.
*Working with Hazardous Waste at this level as defined by the
U. S. Environmental Protection Agency.
       CLASSIFICATION DESCRIPTIONS
Class I - Master Mechanic - assist and direct Class II, Class
  III, and Class IV, diver/wet tender, engineer
  (hydraulic dredge)
Class II - Crane/Backhoe Operator and Mechanic/Welder,
  assistant engineer(hydraulic dredge), leverman
  (hydraulic dredge), diver/tender
Class III - Deck Equipment Operator (Machineryman)
 Maintenance of Crane (over 50 ton capacity)
  or Backhoe (115,000 pounds or more), ug/launch
  operator, Loader/dozer and like equipment on Barge,
 breakwater wall, slip/dock, Scow, Deck Machinery,
  etc.
Class IV - Deck Equipment Operator (Machineryman/Fireman)
  (Four equipment units or more) and Crane Maintenance
  50 ton capacity and under or Backhoe weighing 115,000
 pounds or less, assistant tug operator.
  ------
WELDERS - Receive rate prescribed for craft performing operation
to which welding is incidental.
______
Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29 CFR 5.5(a)(1)(ii)).
```

TUG WORKERS:

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U. S. Department of Labor 200 Constitution Avenue, N. W.

Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

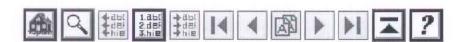
Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.  ${\tt END}$  OF GENERAL DECISION



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### SECTION 02482

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  - 1.1.1.2 Shoal Removal
  - 1.1.1.3 Soundings
  - 1.1.1.4 Volume Calculations
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### SECTION 02482

### DREDGING

### PART 1 GENERAL

### 1.1 UNIT PRICES

### 1.1.1 Measurement

### 1.1.1.1 Allowable Pay Overdepth and Sideslopes

The total estimated dredging quantity shown on the Bidding Schedule includes the required depth material plus the allowable overdepth material and allowable sideslope material. This amount represents the quantity shown on the Request For Proposal drawings plus an additional amount resulting from shoaling that is expected in advance of prior to dredging soundings.

### 1.1.1.2 Shoal Removal

If, before the Task Order is completed, shoaling occurs in any section previously accepted, including shoaling in the finished channel, because of the natural lowering of the side slopes or other natural causes, redredging at the Contract unit price, within the limit of available funds, may be performed if agreed upon by both the Contractor and the Contracting Officer.

### 1.1.1.3 Soundings

The Request For Proposal drawings (See SECTION CLAUSE entitled "REQUEST FOR PROPOSAL DRAWINGS, MAPS AND SPECIFICATIONS") represent the conditions existing at the time of survey, but all soundings shown thereon will be verified and corrected by soundings taken before dredging. Determination of quantities removed will be made from after dredging soundings and the calculations made therefrom to determine quantities by in-place measurement. The determination of the quantities to be paid for in the area specified, after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error.

### 1.1.1.4 Volume Calculations

Within the limits of the allowable pay overdepth and side slope payment limit lines described in the Paragraph entitled "DREDGING", the total amount of materials removed and to be paid for under the Task Order will be measured by the cubic yard in place by computing the volume between the bottom surface shown by new soundings made before dredging and the bottom surface shown by the soundings of a survey made as soon as practicable after the work specified has been completed. Volume computations will be made by the Government by appropriate computer program or by the average end area method, based on cross sections including, but not limited to, cross sections taken at the same locations shown on the contract drawings. The average area of two (2) successive cross sections multiplied by the distance between the cross sections will be accepted as the volume. Any quantities misplaced or not satisfactorily placed in the approved disposal area will be deducted.

### 1.1.1.5 Excessive Dredging

Materials taken from beyond the limits specified in Subparagraphs "Allowable Pay Overdepth" and "Side Slopes", will be excluded from the computed total amount dredged as excessive channel dredging or excessive side slope dredging and for which payment will not be made. The final determination of the amounts of excessive dredging will be based wholly on the surveys made for final examination and acceptance. (See Paragraph entitled "FINAL EXAMINATION AND ACCEPTANCE.")

### 1.1.1.6 Monthly Partial Payments

Monthly partial payments will be based on quantities determined by daily soundings taken by the Contractor or other means acceptable to the Contracting Officer. (See CLAUSE entitled, "QUANTITY SURVEYS.") Sounding surveys for partial payment shall be conducted in the same manner specified in the Paragraph entitled, "PRIOR, AFTER AND CHECK SURVEYS," unless otherwise authorized or directed.

### 1.1.1.7 Continuity of Work

Monthly partial payments will be made for work performed prior to final examination and acceptance. However, as final dredging is being performed for final examination and acceptance, no payment will be made for such final dredging work performed in any area until the depth required under the contract is secured in the whole of such area, unless prevented by ledge rock, original material, or other obstructions, which cannot be removed by the plant specified in the accepted bid, or the equivalent of such plant, without blasting or special apparatus. No payment will be made for final excavation in any area not adjacent to and in prolongation of areas where full depth has been secured, except by decision of the Contracting Officer. If a nonadjacent area is excavated to full depth during the day to day operations carried on under the contract, payment for all work therein may be deferred until the required depth has been secured in the area intervening.

### 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Sounding Equipment Description and Calibration Data; G-AOF

Verification that the Contractor's sounding equipment has been calibrated to correspond with the Government's sounding equipment shall be submitted prior to commencing work. Also submit the description of the Contractor's sounding equipment and transducer frequency prior to commencing work.

Dredging, Conveyance and Placement Plan; G-AOF

Prior to bringing equipment to the project site, submit plans of the proposed dredging, conveyance and placement operations.

Dredging Placement Safety Plan

Prior to commencing work at the placement area, describe in detail the means and methods to be utilized to provide for the public safety at the placement area, all in accordance with the Accident Prevention Plan.

Notice of Start of Dredging

Provide ten calendar day's advance written notice of the planned start of actual dredging operations to allow the Government to schedule and perform the prior-to-dredging sounding survey work before arrival of the dredging equipment.

Sounding Records

A copy of the prior and after soundings shall be furnished.

SD-06 Test Reports

Daily Report of Dredging Operations

Both sides of the report of operations form (ENG FORM 4267 or ENG FORM 27A), as appropriate to the type of work being performed, copies of which are available at Detroit District Area Offices, shall be completed and furnished daily. Each report shall contain a signed certification in the "REMARKS" space attesting that no overflow or discharge occurred from the dredging vessel(s) while dredging and while in transit from the dredging area to the unloading area. In the event an overflow or discharge occurs while dredging or while in transit, such certification shall not be made and instead an oral notification and complete written report on the incident shall be made to the Contracting Officer in shortest possible time. When appropriate and approved, quality control compliance inspections may be reported under the "REMARKS" item on the form. The Contractor shall submit an original and two (2) copies per calendar day to the Contracting Officer unless otherwise directed. An adequate supply of the report of dredging operation forms will be provided the Contractor by the Government upon request.

### 1.3 PROJECT/SITE CONDITIONS

### 1.3.1 Character of Materials

The records of previous dredging and sampling are available for inspection at the Office of the Engineering & Construction Division, U.S. Army Corps of Engineers, Detroit District, 477 Michigan Avenue, McNamara Building, Detroit, Michigan 48226.

Arcadia Harbor: The material within the required dredging limits are those composing the shoaling since the areas were last dredged and consist primarily of sand and with trace amounts of silt and gravel. Displaced armor stone up to 3 tons may be present near the breakwater. However, they are not required to be removed.

Frankfort Harbor: The materials within the required dredging limits are those composing of the shoaling that has occurred since the areas were last dredged and are comprised primarily of sand with some peat.

Grand Haven Harbor: The materials within the required dredging limits for Grand Haven Harbor are those composing the shoaling that has occurred since

the last time the area was dredged consists of mainly sand with varying amounts of silt and some organic content including zebra mussel shells.

Holland Harbor: The materials within the required dredging limits for Holland Harbor are those composing the shoaling that has occurred since the last time the area was dredged consists of mainly sand with varying amounts of silt and some organic content.

Leland Harbor: The shoaling that has occurred since the areas were last dredged and consist mainly of sand with traces of silt and gravel. Displaced armor stone up to 3 tons may be present near the breakwater. However, they are not required to be removed.

Lexington Harbor: The materials to be removed within the required limits for Lexington Harbor are those composing the shoaling that has occurred since the last time the area was dredged. The shoaled materials consist primarily of sand and silt with some gravel and organic materials. Native materials below the required depth prism consists of dense sands, silts, and clays, with some gravel. Cobbles and boulders are also present in the native material.

Ludington Harbor: The materials within the required dredging limits are those composing the shoaling that has occurred since the last time the areas was dredged and consist of predominantly sand with varying amounts of silt. In addition, small pieces of driftwood may be present in the material to be dredged. Original material (sandy clay) may be encountered within the allowable everdepth and side slopes. Driftwood, cobbles and boulders may be encountered near breakwaters, revetments and pierheads and shall not be removed if they are a part of the harbor structures nor shall toe stone be undermined.

Manistee Habor: The materials within the required dredging limits are those composing the shoaling that has occurred since the last time the areas was dredged and consists of mainly of sand with varying amounts of silt and gravel with some organic content. In the overdepth prism, silty or sandy clay may be encountered. Slabwood may be encountered in the updtream portion of the river channel area. Slabwood is defined as "waste" from historic logging operations - the irregular outside pieces of cut from a log in squaring over it or preparing it for milling. Slabwood varies in size with the majority of it being approximately one inch thick, three inches wide and three feet long.

Muskegon Harbor: The materials within the required dredging limits are those composing the shoaling that has occurred since the areas was last dredged and consist predominantly of sand with varying amounts of silt and organic content. Shells and slab wood may be encountered throughout the project.

New Buffalo Harbor: The materials within the required dredging limits are those composing the shoaling that has occurred since the last time the area was dredged and consist of predominantly sand with varying amounts of silt. Wood piling, cobbles boulders may be encountered in the entrance channel. Pieces of slabwood may be encountered in the dredging area. Slabwood is defined as "waste" from historic logging operations - the irregular outside pieces of cut from a log in squaring over it or preparing it for milling. Slabwood varies in size with the majority of it being approximately one inch thick, three inches wide and three feet long.

Pentwater Harbor: The shoaling that has occurred since the areas were last

dredged and consist mainly of sand with traces of silt and gravel. Cobbles and small boulders may be encountered along the south revetment. However, they are not required to be removed.

Portage Lake Harbor: The materials within the required dredging limits are those composing the shoaling that has occurred since the last time the area was dredged and consists primarily of sand, with minor amounts of silt and organics.

Port Sanilac: The materials to be removed within the required limits for Port Sanilac Harbor consists primarily of the shoaling that has occurred since the last time the area was dredged. The shoaled materials consist of varying proportions of sand and silt. Riprap and mattress stones may be encountered near breakwaters, revetments and pier heads. Below the overdepth prism, original material consisting of clay, sand and gravel. Cobbles and boulders may be encountered.

Saugatuck Harbor: The materials within the required dredging limits are those composing the shoaling that has occurred since the areas were last dredged. The material to be dredged in this area consists primarily of sand with some amounts of silts.

St. Joseph Harbor: The materials within the required dredging limits are those composing the shoaling that has occurred since the last time the area was dredged and consist mainly of sand with varying amounts of silt and organic content. Driftwood, cobbles and boulders may be encountered near revetments, breakwaters and pier heads at the harbor.

White Lake Harbor: The materials within the required dredging limits are those composing the shoaling that has occurred since the last time the areas were dredged and consists of predominantly sand and silt. Minor amounts of slabwood may be encountered. Cobbles and boulders may be encountered near breakwaters, revetments and pierheads and shall not be removed if they are a part of the harbor structures nor shall toe stone be undermined. Slabwood is defined as "waste" from historic logging operations - the irregular outside pieces of cut from a log in squaring over it or preparing it for milling. Slabwood varies in size with the majority of it being approximately one inch thick, three inches wide and three feet long.

### 1.3.2 Placement Area Conditions

The specific limits of the placement area will be shown on the request For Proposal drawings. The individual Request For Proposal limit of placement shall be somewhere within the placement zones as described in paragraph titled "Location". Dredged materials placed outside of the limits of the placement area shall be removed at no additional cost to the Government and deposited within the area approved for placement of dredged materials.

### 1.4 SEQUENCING AND SCHEDULING

### 1.4.1 Delivery of Plant and Order of Work

Prior to bringing equipment to the project site, the contractor shall submit a Dredging, Conveyance and Placement Plan describing in detail how he plans on accomplishing the proposed work under each Task Order. Unless otherwise directed by the Contracting Officer, the Contractor shall accomplish the required work within the time established in each Request For Proposal."

### PART 2 PRODUCTS (NOT APPLICABLE)

### PART 3 EXECUTION

### 3.1 DREDGING

Ten (10) calendar days prior to any work being performed the contractor shall provide written Notice of Start of Dredging to the Contracting Officer so that the Government can schedule and perform prior soundings. The Contractor shall perform all dredging work to remove material to the required depths within the limits shown on the drawings and as specified. Any materials in the allowable overdepth prism and allowable side slopes are not required to be removed. Rocks, cobbles (3 to 12 inches) and boulders (over 12 inch) may be encountered near breakwaters, revetments and pier heads and shall not be removed if they are part of the harbor structures nor shall toe stones be undermined. Indicated required dredging areas within required downstream and upstream dredging limits will be revised by the Government, after obtaining the before (prior to) dredging soundings. The Contractor may be required to suspend dredging at any time when for any reason the gauges or ranges cannot be seen or properly followed.

### 3.1.1 Obstructions

Should original material, ledge rock, boulders, cobbles, rock fragments, wrecks, scrap materials, snags, stumps, piles, debris or other material be encountered which cannot be removed by the plant specified in the accepted bid, or equivalent plant, without blasting or special apparatus, the Contractor shall remove therefrom all overlying material within the required dredging prism which in the judgment of the Contracting Officer can be removed by the use of the plant specified in the accepted bid or equivalent plant.

### 3.1.1.1 Caution Areas

There are several caution areas shown on the Request For Proposal drawings where timber piling, wood cribs and stone exist at or near the federal channel limits. If these obstructions are encountered, only the overlaying materials needs to be dredged.

### 3.1.2 Channel Crossing

Any existing channel crossing that is damaged due to the Contractor's operations shall be repaired by the Contractor and at its expense.

### 3.1.3 Overdepth and Tolerances

Two (2) drawings are enclosed in SECTION 01999 to aid in defining the requirements specified hereinafter.

### 3.1.3.1 Allowable Pay Overdepth

To cover inaccuracies of the dredging process, materials actually removed from within the channel lines to a depth of not more than one (1) foot below the required pay prism line will be measured and paid for at the Contract unit price. However, the maximum quantity of overdepth materials to be paid for will be equivalent to that quantity present within the one (1) foot overdepth prism immediately below the required materials to be

removed as determined from the prior to dredging soundings. Any dredging below the allowed one (1) foot will be considered as excessive dredging and for which payment will not be made.

### 3.1.3.2 Side Slopes

Materials actually removed, within limits shown on the drawings, to provide for final side slopes not flatter than one vertical (1V) on two horizontal (2H), perpendicular to the channel line or dredge limit line, whichever is applicable, but not in excess of the amount originally lying above the side slope payment limit line will be calculated and paid for, whether dredged in their original location or removed by dredging a space at the bottom of the slope to accommodate the up slope materials falling into the cut. The provisions of this Subparagraph also apply to end slopes at the upstream and downstream dredging limits of the channel. However, if the Contractor elects to use the box cut method on the side slope this material will be paid for whether dredged in their original location or removed by dredging a space at the bottom of the slope to accommodate the side slope materials falling into the box cut.

### 3.1.3.3 Toe of Side Slope

Any materials remaining above the required pay prism line will be allowed to remain in place, but will not be paid for, provided these materials lie below the tolerance line specified hereinafter. The toe of side slope tolerance line, as shown on the cross-section drawings, is defined as a straight line through the following two (2) points and extended to the side slope line:

- a. A point on the required pay prism line located a distance from the channel line or dredge limit line, as shown on the Request For Proposal drawings (shown on the enclosed drawings and Request For Proposal drawings as tolerance dimension "T.D.") and ;
- b. A point located at the channel line or dredge limit line, whichever is applicable, and above the required pay prism line a distance equal to the specified channel allowable pay overdepth.

### 3.1.3.4 Shoals

A tolerance of 0.5 feet above the required pay prism line, in the remaining channel area, will be allowed for acceptance of remaining shoal materials. The allowed shoal materials may be left in place but shall be of such nature that they will not affect navigation, and will not be paid for unless they are removed. The remaining channel area is defined as that portion of the channel which lies between the two (2) points located on the required pay prism line for determining toe of side slope tolerance line and is shown on the enclosed drawings titled "CHANNEL SHOAL TOLERANCE" as Tolerance Area. The allowed shoaling shall not be continuous throughout the required dredging area. The limitations for individual shoals are as follows:

a. Maximum width:

Maximum width of each remaining shoal area not required to be removed shall be not more than five percent (5%) of the full project channel width or ten (10) feet, whichever is greater.

b. Longitudinal length:

Longitudinal length of each remaining shoal area not required to be removed shall be not more than twenty-five percent (25%) of the full project channel width or fifty (50) feet, whichever is greater.

### c. Cumulative width:

Cumulative width of remaining individual shoals not required to be removed within the shoal area, at any channel cross section, shall be not more than twenty-five percent (25%) of the full project channel width or ten (10) feet, whichever is greater.

### 3.2 CONVEYANCE AND TRANSFER OF DREDGED MATERIALS

### 3.2.1 General

All nautical vessels, pipelines and land based transport and conveyance systems shall be operated, loaded and unloaded in such manner as to prevent overflow, spills, leaks, waste, or other loss of dredged materials between point of pick-up and point of deposition within the placement area. Hauling vessels shall have sufficient sidewall height and integrity to prevent drainage over or through the sides and bottom during hauling.

### 3.2.2 Restriction

The method employed by the Contractor in conveying dredged materials to the placement area shall be as approved by the Contracting Officer at all times. Temporary dumping or placement of materials outside of the placement area for subsequent rehandling into the placement area is prohibited unless otherwise approved by the Contracting Officer.

### 3.3 DISPOSAL OF DREDGED MATERIALS

### 3.3.1 General

Prior to placement of dredge material, the Contractor will submit a Dredging Placement Safety Plan, describing in detail the means and methods to be utilized to provide for the public safety at the placement area. The dredged materials shall be deposited within the Government-furnished placement area shown on the Request For Proposal drawings. The Government-furnished placement area has sufficient capacity to contain all materials to be dredged under this Contract;. Placement of the dredged materials within the placement area shall be as specified and shown except as otherwise directed by the Contracting Officer. Except as otherwise authorized by the Contracting Officer in writing, no disposal shall be performed unless a representative of the Contractor for Quality Control is present at the time. The method employed by the Contractor in depositing dredged materials in the placement area shall be as approved by the Contracting Officer at all times.

### 3.3.1.1 Misplaced Material

Any material that is deposited elsewhere than in the places designated in each Task Order or approved by the Contracting Officer will not be paid for. The Contractor shall be required to remove such misplaced material at its expense and deposit it in the place designated in each Task Order or approved by the Contracting Officer.

### 3.3.2 Government-Furnished Placement Area

### 3.3.2.1 Location

As shown on the drawings and as specified, the dredged materials shall be placed within the lakeward and landward limits as shown on the Request For Proposal drawing, Within these limits the dredged materials shall be evenly distributed along the entire length of the placement area shown, parallel to the Lake Michigan and Lake Huron shoreline. Placement area for various harbors shall be as indicated below:

### HARBOR PLACEMENT ZONE

Arcadia Harbor	2,000'	-	2,800'	North				
Frankfort Harbor	1,500'	_	3,000'	North	of	the N	North	Pier
Grand Haven Harbor	6,000'		7,000'	South				
Holland Harbor	3,000'		4,500'	South	of	the S	South	Breakwater
Leland Harbor	1,000'	_	2,700'	South				
Lexington Harbor	800'	-	3,900'	South	of	the S	South	Breakwater
Ludington Harbor	7,000	_	9,000'					Breakwater
Manistee Harbor	1,000'	-	3,000'	North	of	the 1	North	Pier
Muskegon Harbor	9,000'	-	11,500'	South				
New Buffalo Harbor	1,500'	-	3,000'					Breakwater
Pentwater Harbor	1,500'	-	3,000'	North	of	the 1	North	Pier
Portage Lake Harbor			5,000'	South				
Port Sanilac Harbor			10,400'	South	of	the S	South	Breakwater
Saugatuck Harbor	500'	-	2,700'	South	of	the S	South	Pier
St. Joseph Harbor	500'	_	2,000'	South	1 0	f Parl	k Stre	eet
White Lake Harbor	3,000 *	-	5,000'	/27				

### 3.3.2.2 Placement

As shown on the drawings and as specified, the dredged materials shall be placed in an area bounded by the existing shoreline and the most landward six (6) foot depth contour and as shown on the Request For Proposal drawings. The dredged materials at Lexington and Port Sanilac Harbors shall be placed in an area bounded by the most landward four (4) foot depth contour and the most landward eight (8) foot depth contour and the limits as shown on the Request For Proposal drawings. Within these limits the dredged materials shall be evenly distributed along the entire length of the placement area, parallel to the Lake Michigan shoreline and Lake Huron shoreline for Lexington and Port Sanilac Harbors.

### 3.3.2.3 Arcadia Harbor

The Contractor must place personnel, equipment and discharge piping on the land at this harbor only in location approved by the Contracting Officer. Such locations shall be coordinated and established on the field with the Contracting Officer's Representative for the purpose of protecting a plant species (dune thistle) classified by the Government as threatened. See SECTION 01130 entitled "ENVIRONMENTAL PROTECTION").

### 3.4 CONTRACTOR QUALITY CONTROL

The Contractor shall establish and maintain a quality control system for dredging and placement operations to assure compliance with the Contract requirements and provide a Daily Report of Dredging Operations by

completing the appropriate form and completing all inspections of items under this system, including, but not limited to, the following:

- a. Layout of work, and placement areas.
- b. Proper dredging depths and placement heights.
- c. Conveyance and placement operations.
- d. Removal of misplaced material.
- e. Safety requirements.

### 3.5 GOVERNMENT INSPECTION

### 3.5.1 Gauge Maintenance

The Contractor shall maintain its gauges, ranges, location marks and limit marks in proper order and position. The presence of a Government inspector shall not relieve the Contractor of its responsibility for the proper execution of the work in accordance with the specifications and drawings.

### 3.5.2 Facilities

The Contractor shall furnish, on the request of the Contracting Officer or any inspector, the use of such boats, boat operators, laborers and material forming a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting the work. However, the Contractor will not be required to furnish such facilities for the surveys prescribed in the Paragraph "FINAL EXAMINATION AND ACCEPTANCE."

### 3.5.3 Transportation

The Contractor shall furnish, on the request of the Contracting Officer or any inspector, suitable transportation from designated points on shore to and from the various pieces of off-shore plant and off-shore placement areas.

### 3.5.4 Compliance

Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer, and the cost thereof will be deducted from any amounts due or to become due the Contractor.

### 3.6 PRIOR, AFTER AND CHECK SURVEYS

For each Task Order, prior, after and check surveys will be made by sonic sounding methods. The Contractor's sounding equipment shall be calibrated to correspond with the Government's sounding equipment. The Government will make prior and after surveys and may make check surveys. The Contractor shall make check surveys. Sounding lines will be established by the Government for the required dredge area-to provide the best fit of lines, within that area - to use average end cross sections for quantity calculations. Cross-sections will have the required spacing as necessary to provide a good representation of the area surveyed, unless otherwise determined by the Contracting Officer. The check surveys and after dredging soundings shall be taken as close as practicable on the same lines established and used for the prior to dredging soundings, unless otherwise

determined by the Contracting Officer. The full electronic data set shall be used to determine cubic yards in place. Additional soundings will be taken as the Contracting Officer may deem necessary. Only one (1) prior survey will be made for the project, by the Government. If additional prior surveys are required, due to the Contractor's operations, the cost of such surveys shall be paid by the Contractor. The cost of such surveys shall be the same as specified in the Paragraph entitled, "FINAL EXAMINATION AND ACCEPTANCE."

### 3.7 FINAL EXAMINATION AND ACCEPTANCE

### 3.7.1 Examination

For each Task Order, as soon as practicable after the completion of the entire work or any section thereof (if the work is divided into sections) and in the opinion of the Contracting Officer will not be subject to damage by further operations under the Contract, such work will be thoroughly examined at the cost and expense of the Government by sounding or by sweeping, or both, as determined by the Contracting Officer. Should any shoals, lumps or other lack of Contract depth be disclosed by this examination, the Contractor is required to remove same by dragging the bottom or by dredging at the Contract rate for dredging, but if the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoals may be waived at the discretion of the Contracting Officer. The Contractor or its authorized representative will be notified when soundings and/or sweepings are to be made, and will be permitted to accompany the survey party. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two (2) sounding or sweeping operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping, the cost of such third and any subsequent sounding or sweeping operations will be charged against the Contractor at the rate of \$3,500 per calendar day in which the Government plant is engaged in sounding or sweeping and/or is en route to or from the site or held at or near the said site for such operations.

### 3.7.2 Acceptance

Final acceptance of the whole or part of the work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work.

END>